

July 2008

# Tracker

Measures of Departmental Performance



Missouri Department of  
Transportation



Missouri 2007  
Quality Award



Winner

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# Greetings from MoDOT

The Missouri Department of Transportation is committed to being open and transparent. We want you to know what we do well, what we don't do so well and what we are doing to get better. That is why we created the Tracker.

This document is your window into MoDOT – warts and all. It invites you to hold us accountable for exceeding your expectations. You expect MoDOT to get the best value out of every dollar spent. You expect us to make highways smoother and safer, soon. You expect us to fix bad bridges, be responsive and to proactively give you the information you need. You expect us to provide a world-class transportation experience.

We share your expectations and have built 18 tangible results around them. These results guide us everyday as we go about the business of delighting our customers. In the Tracker, you will see that we have established measures to gauge our progress and we are comparing ourselves to the best organizations in the country.

You can use the Tracker to see how we are measuring up. We make it available in a printed format and on our website at [www.modot.org](http://www.modot.org). Missouri's transportation system will not improve unless we all work together. The Tracker is one of the many ways you can help. Please look it over and let us know how we are doing.

Sincerely,



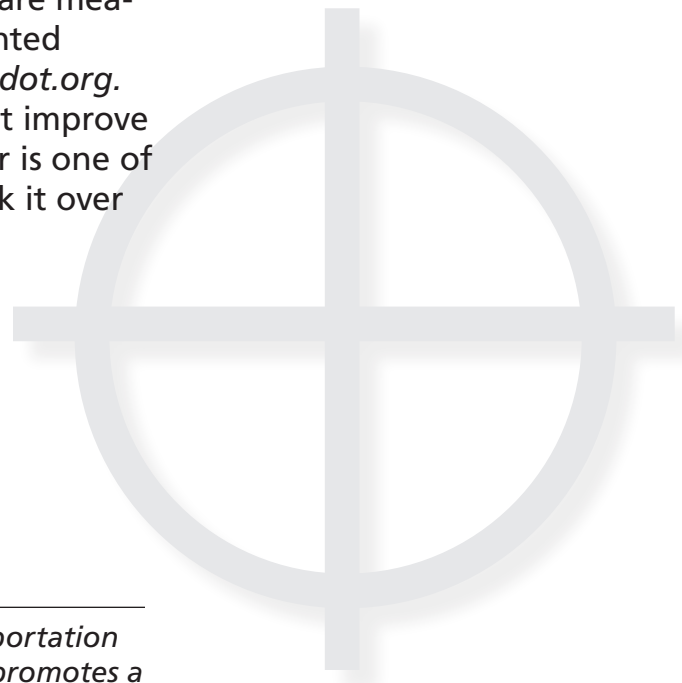
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## **Mission**

*Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.*



Pete K. Rahn, Director  
Missouri Department of  
Transportation



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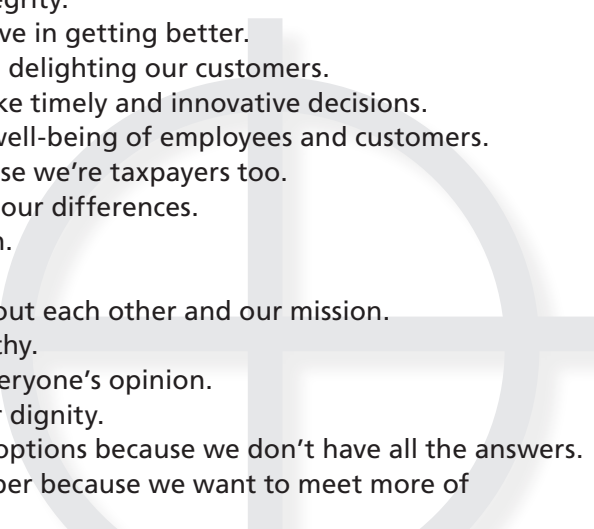
# Tangible Results

- Uninterrupted Traffic Flow
- Smooth and Unrestricted Roads and Bridges
- Safe Transportation System
- Roadway Visibility
- Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)
- Partner With Others to Deliver Transportation Services
- Leverage Transportation to Advance Economic Development
- Innovative Transportation Solutions
- Fast Projects That Are of Great Value
- Environmentally Responsible
- Efficient Movement of Goods
- Easily Accessible Modal Choices
- Customer Involvement in Transportation Decision-Making
- Convenient, Clean and Safe Roadside Accommodations
- Best Value for Every Dollar Spent
- Attractive Roadsides
- Advocate for Transportation Issues
- Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

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# Value Statements

MoDOT will -

- support and develop employees because we believe they are the key to our success.
  - be flexible because we believe one size does not fit all.
  - honor our commitments because we believe in integrity.
  - encourage risk and accept failure because we believe in getting better.
  - be responsive and courteous because we believe in delighting our customers.
  - empower employees because we trust them to make timely and innovative decisions.
  - not compromise safety because we believe in the well-being of employees and customers.
  - provide the best value for every dollar spent because we're taxpayers too.
  - value diversity because we believe in the power of our differences.
  - be one team because we all share the same mission.
  - use teamwork because it produces the best results.
  - foster an enjoyable workplace because we care about each other and our mission.
  - be open and honest because we must be trustworthy.
  - listen and seek to understand because we value everyone's opinion.
  - treat everyone with respect because we value their dignity.
  - seek out and welcome any idea that increases our options because we don't have all the answers.
  - always strive to do our job better, faster, and cheaper because we want to meet more of Missouri's needs.
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**Please Note:** Tangible Results are listed in reverse alphabetical order, not by importance.

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# Uninterrupted Traffic Flow

*Tangible Result Driver – Don Hillis,  
Director of System Management*

Missouri drivers expect to get to their destinations on time, without delays. Traffic, changes in weather, work zones and highway incidents can all impact their travel. MoDOT works to ensure that motorists travel as efficiently as possible on the state system by better managing work zones, snow removal and highway incidents, and by using the latest technology to inform motorists of possible delays and available options. Better traffic flow means fewer crashes.



# Uninterrupted Traffic Flow

## *Average travel indices and speeds on selected freeway sections*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Troy Pinkerton, Traffic Liaison Engineer

### **Purpose of the Measure:**

This measure tracks the average travel index values and average speeds on various freeway sections. The desired trend is for the travel index to remain at or near a value of 1.00, which is representative of a free-flow condition. The travel index is directly related to the average speed. The travel index represents the level of congestion by taking into consideration average speed and traffic volumes. The travel index is calculated according to the following equation:

$$\text{Travel Index} = \text{Average speed} / \text{Free-flow speed}$$

Average speeds are taken from sensor data. The free-flow speed is constant and is equal to the highest hourly average speed for any hour in that data set.

### **Measurement and Data Collection:**

Data from the St. Louis and Kansas City regions are provided by MoDOT's traffic management centers.

Information about the St. Louis traffic management center, Gateway Guide, can be found at

<http://www.gatewayguide.com> and information about the traffic management center in Kansas City, KC Scout, can be found at <http://www.kcscout.net/>. Data for the St. Louis region is also provided through a partnership with *Traffic.com*. Data for each location is updated quarterly.

### **Improvement Status:**

#### Kansas City metropolitan region:

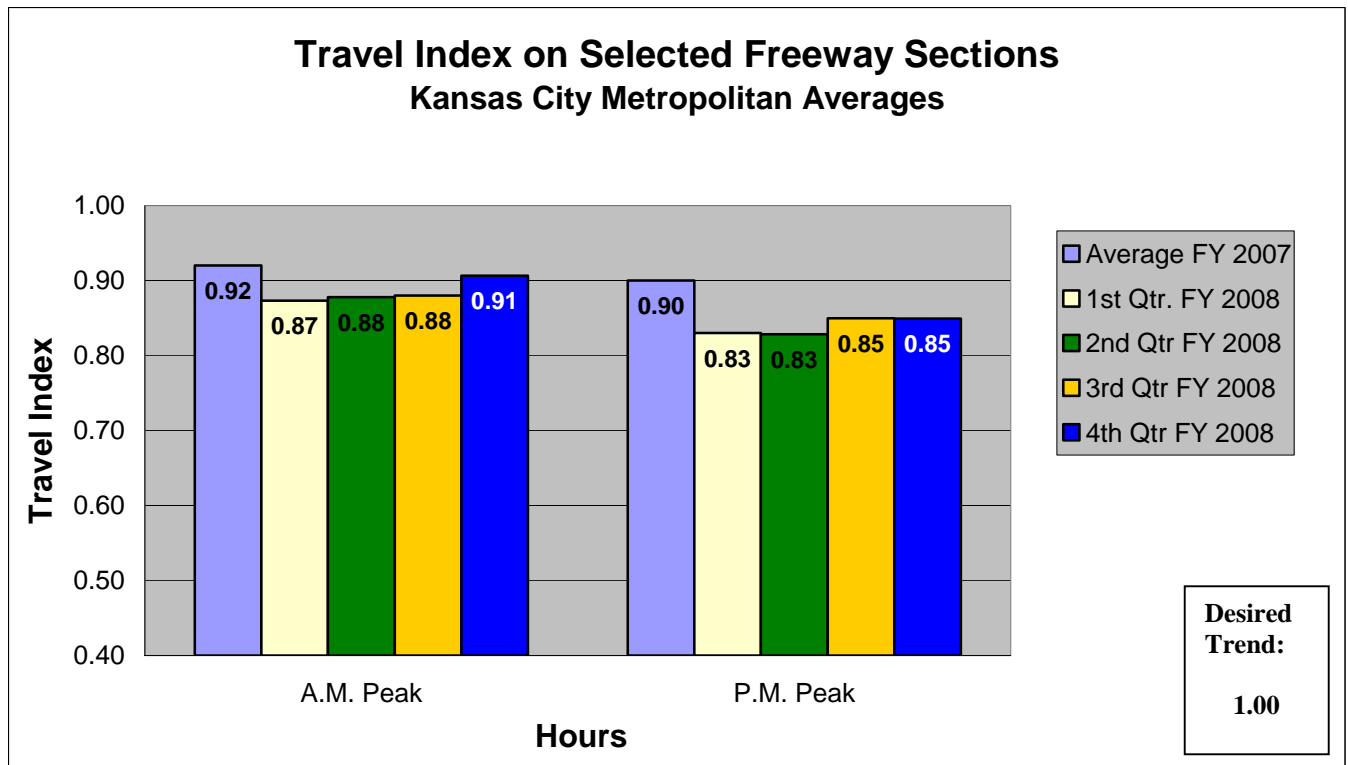
As shown on the graph, the freeway systems in the Kansas City region are performing in the mid-80 to low-90 percentile range during the peak hours, as compared to the free-flow condition. The morning peak Travel Index increased slightly over the previous quarter at 0.91, while the evening peak Travel Index remained consistent with last quarter at 0.85 for the fourth quarter fiscal year 2008. The average a.m. and p.m. peak travel indices for fiscal year 2007 for this region is 0.92 and 0.90, respectively. Most of the Kansas City region has been free from significant work zone impacts. However, bridge work and resurfacing jobs are being conducted at the Paseo Bridge causing some slow downs in the morning commute southbound into downtown. This should see some dramatic slow downs over the next few years due to the KC ICON bridge replacement project. Additional information on the construction activities along interstates 29 and 35 can be found at [www.kcicon.org](http://www.kcicon.org).

#### St. Louis metropolitan region:

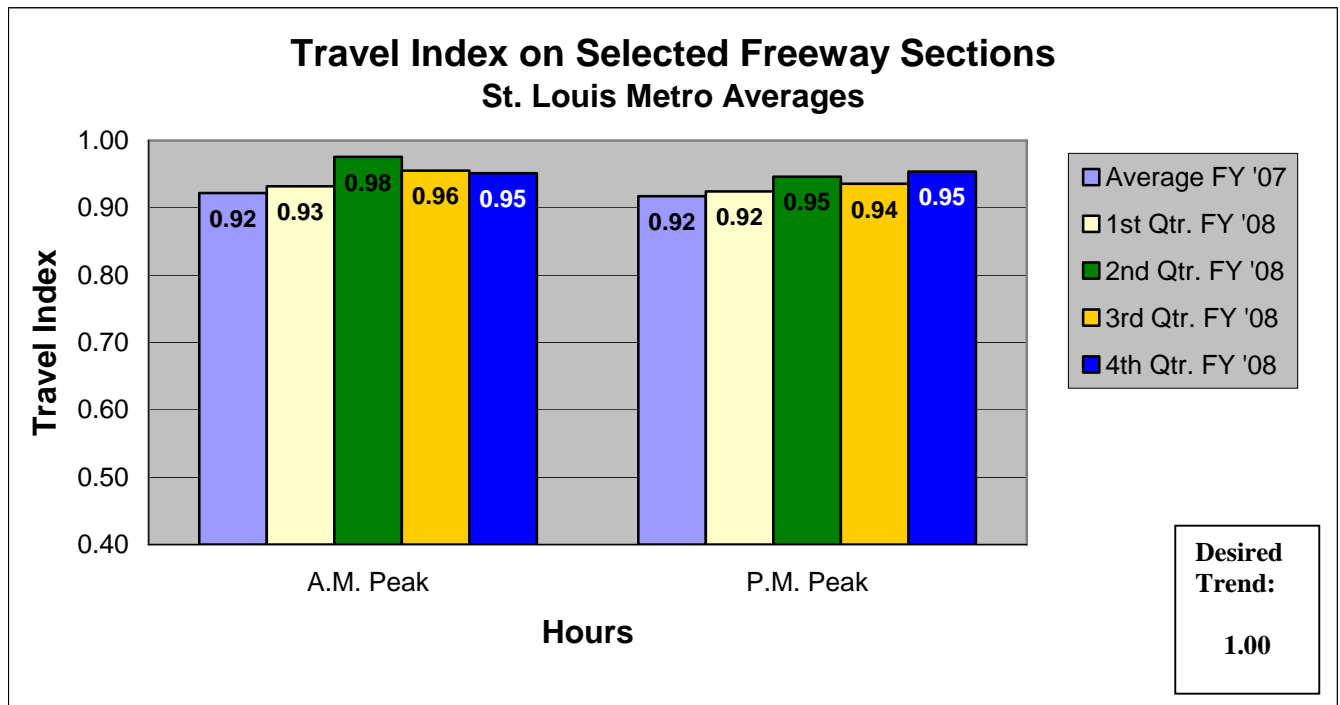
Data in the St. Louis region shows a slight decrease in the quarterly morning peak Travel Index, while the evening peak increased slightly. The morning peak Travel Index decreased from 0.96 to 0.95. The evening peak Travel Index increased from 0.94 to 0.95 for the fourth quarter fiscal year 2008. The average peak travel indices for fiscal year 2007 for this region were 0.92 for both the morning and evening peaks. The average peak travel indices for fiscal year 2008 for this region were 0.95 for the morning and 0.94 for the evening. This quarter is the second of four quarters impacted by the closure of the western portion of I-64. Additional information on the construction activities along I-64 can be found at [www.thenewi64.org](http://www.thenewi64.org).

#### Statewide:

The statewide average speed on rural routes for this quarter is 69.39 mph, which is an increase from last quarter's report of 67.27 mph. Historically, we have seen an increase in average speeds in the first and fourth quarters of the fiscal year. Fourth quarter fiscal year 2007 average speed was 68.83 mph. Dynamic message sign usage continues around the clock as a constant reminder to travelers to drive safely, as well as providing current road condition information. The department's partnership with the Missouri State Highway Patrol has fostered improvements to our management processes with regards to incident management and notification through sign messaging.

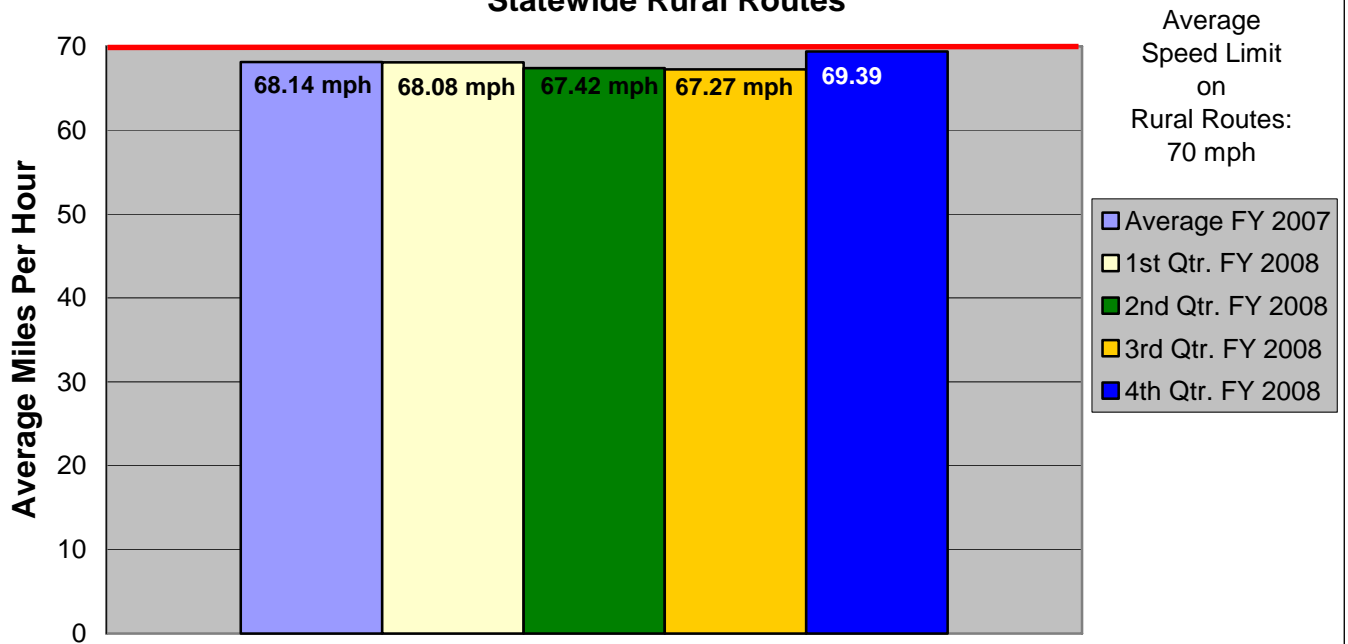


\* The average fiscal year 2007 data is an average of the last two quarters in fiscal year 2007. The 1<sup>st</sup> & 2<sup>nd</sup> quarters of fiscal year 2007 are unavailable.



\* The average fiscal year 2007 data is an average of the last two quarters in fiscal year 2007. The 1<sup>st</sup> & 2<sup>nd</sup> quarters of fiscal year 2007 are unavailable.

## Average Travel Speeds on Selected Roadway Sections Statewide Rural Routes



\*The average fiscal year 2007 data is an average of the last two quarters in fiscal year 2007. The 1<sup>st</sup> & 2<sup>nd</sup> quarters of fiscal year 2007 are unavailable.

## Uninterrupted Traffic Flow

### *Average rate of travel on selected signalized routes*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Julie Stotlemeyer, Traffic Liaison Engineer

**Purpose of the Measure:**

This measure indicates how well selected arterials across the state are operating during peak traffic times. As improvements are made, such as signal timing or access management, this measure will show the effects of those efforts and decisions on the arterial system.

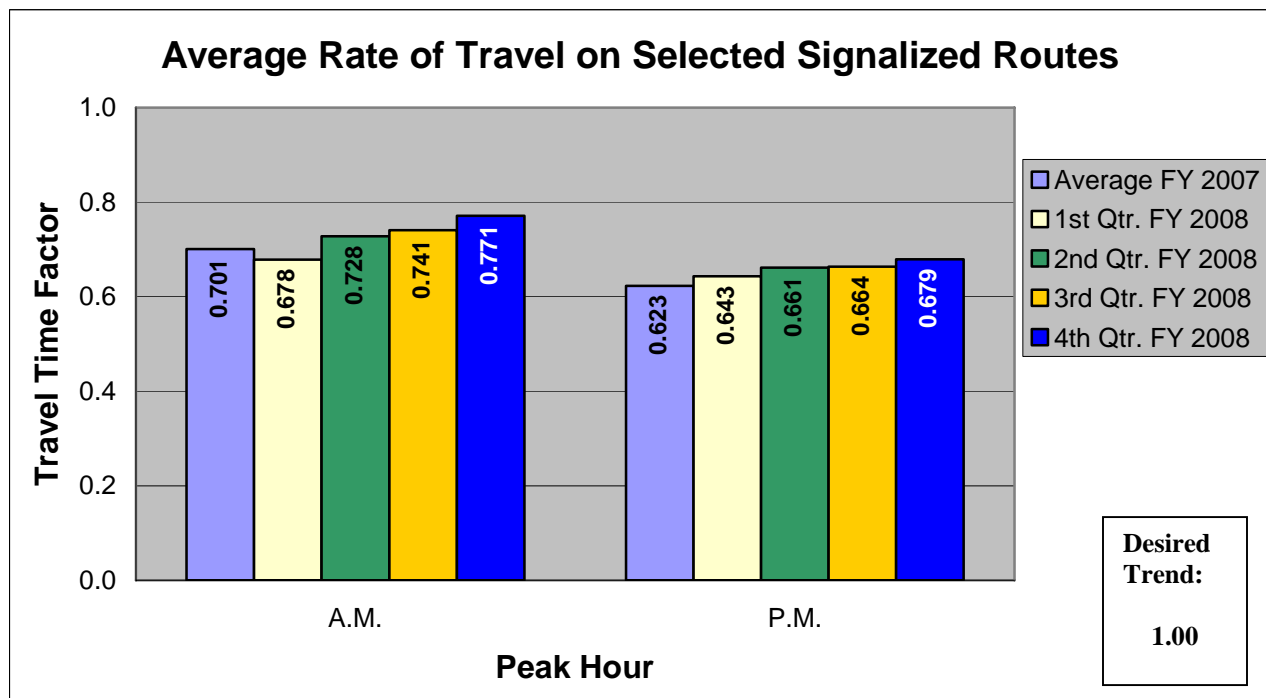
**Measurement and Data Collection:**

Travel times are measured on various arterials. Data is collected from driving each route twice during a.m. and p.m. peak times and timing how long it takes to traverse the route. The travel time is compared to the speed limit and the travel time factor determined. As the travel time factor approaches 1.00, traffic is moving at the speed limit. Data collection began in the second quarter of fiscal year 2007. This is a quarterly measure.

**Improvement Status:**

For fourth quarter fiscal year 2008, the average statewide travel time factor for a.m. peak is 0.771 and p.m. peak is 0.679. Overall performance is 0.725. The a.m. peak travel time factor is nine percent higher than p.m. peak travel time factor. Fourth quarter data shows a.m. and p.m. peaks for arterials operating higher than the average for fiscal year 2007. For fourth quarter fiscal year 2008, the a.m. peak travel time factor is four percent higher and the p.m. peak travel time factor is five percent higher than the fourth quarter fiscal year 2007 a.m. and p.m. peak travel time factors.

The average rate of travel on selected signalized routes has improved due to increased retiming of signals.



\* The average FY 2007 data is from the last three quarters in FY 2007. The 1<sup>st</sup> quarter FY 2007 is unavailable.

## Uninterrupted Traffic Flow

### *Average time to clear traffic incident*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Traffic Liaison Engineer

**Purpose of the Measure:**

This measure is used to determine the trends in incident clearance on the state highway system. A traffic incident is an unplanned event that creates a temporary reduction in the number of vehicles that can travel on the road. The sooner an incident is removed, the sooner the highway system returns to normal capacity. Therefore, responding to and quickly addressing the incidents (crashes, flat tires and stalled vehicles) improves system performance.

**Measurement and Data Collection:**

Traffic Management Center staff record “incident start time” and the time for “all lanes cleared.” Average time to clear traffic incidents is calculated from these times.

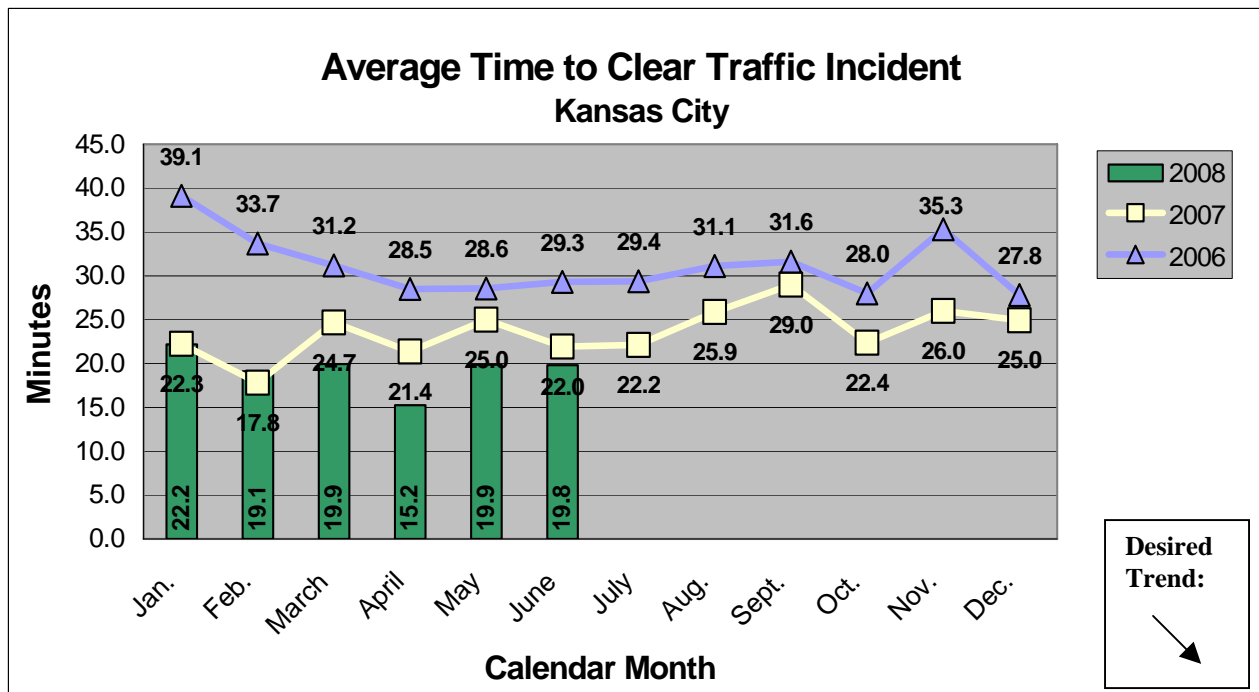
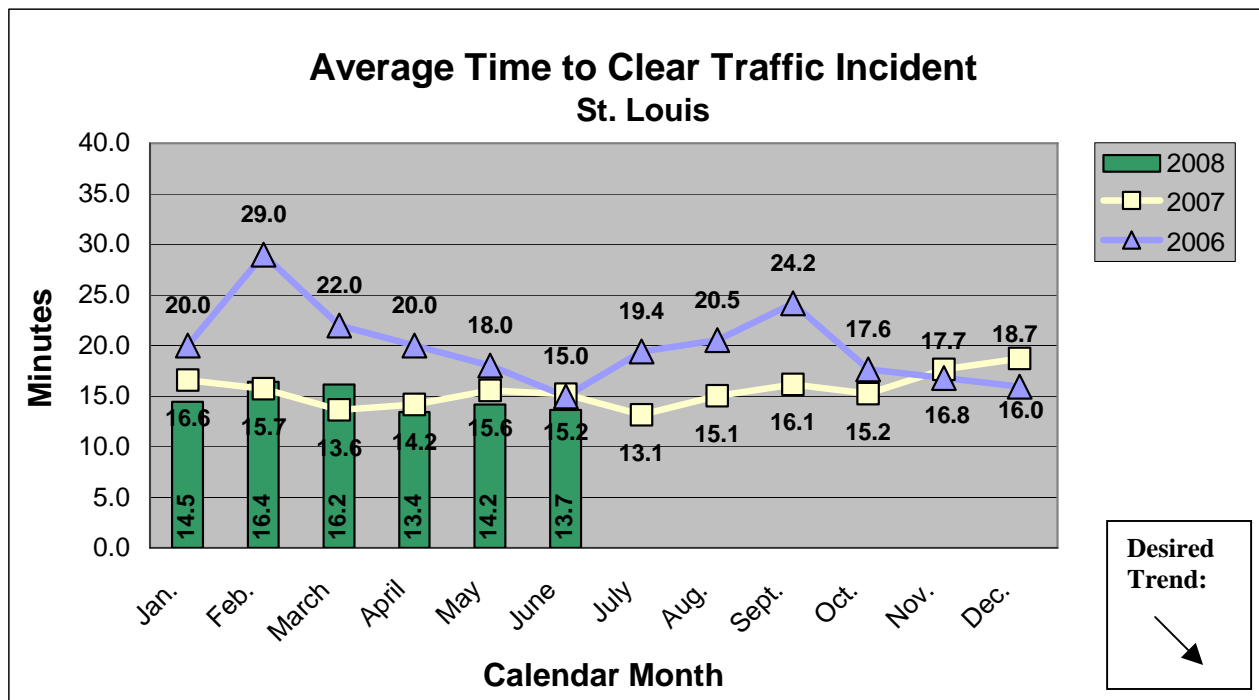
**Improvement Status:**

The Kansas City area continues to experience incident clearance times at or near those for the same time period last year. Kansas City collected data on 186, 194, and 215 incidents respectively for the months of April, May, and June. April has a significantly lower average clearance time because there were only 4 incidents that lasted longer than 2 hours (187 minutes average), which is a 45 percent decrease comparative to other months. Increased efforts in incident management, Motorist Assist and police coordination in the Kansas City region continues to support MoDOT’s objective of quick clearance and open roadways.

St. Louis recorded 679, 844, and 912 incidents respectively for the months of April, May and June. The overall time to clear incidents remains fairly consistent. St. Louis’ data includes considerably more incidents because St. Louis monitors more freeway miles than the Kansas City area.

This data consists of only those incidents in which the TMC was able to collect data.





## Uninterrupted Traffic Flow

### *Average time to clear traffic backup from incident*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Traffic Liaison Engineer

**Purpose of the Measure:**

This measure tracks the amount of time it takes to return traffic flow back to normal after a traffic incident. A traffic incident is any unplanned event that creates a temporary reduction in the number of vehicles that can travel on the road.

**Measurement and Data Collection:**

“All lanes cleared” and “clear backup” times are being recorded by MoDOT’s Traffic Management Centers in Kansas City and St. Louis. Average times to clear traffic backups are calculated from these recorded times. Kansas City reports capture when a backup is relieved as an automated process. The Kansas City area has devices to collect data along portions of interstates 435 and 70. St. Louis collects data manually using video equipment and verification from Motorist Assist operators. St. Louis continues to record “clear backup” times when they perceive traffic to be back to “normal” conditions. They will use advanced transportation management system devices and software when they become available.

**Improvement Status:**

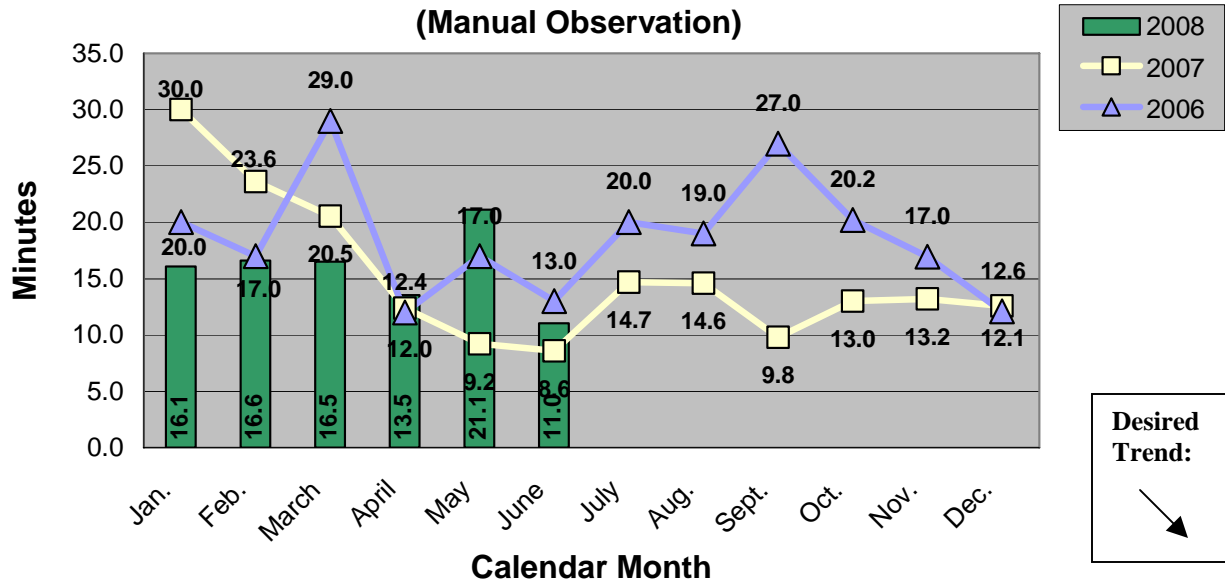
The Kansas City data includes all detected incidents on the KC Scout instrumented routes. The St. Louis data only includes a portion of major incidents on the St. Louis freeway network that can be monitored by operators in the traffic management center or by Motorist Assist and emergency response personnel on the scene. The St. Louis data does not necessarily capture short-term incidents that clear before a Motorist Assist operator can get to the scene. St. Louis area routes also have larger traffic volumes that create more significant congestion problems than in Kansas City.

The average time to clear traffic backup in both Kansas City and St. Louis has remained fairly consistent due to the effectiveness of travel-time systems on dynamic message signs and drivers having real-time information to make informed decisions about detouring away from extended backups and secondary accidents.

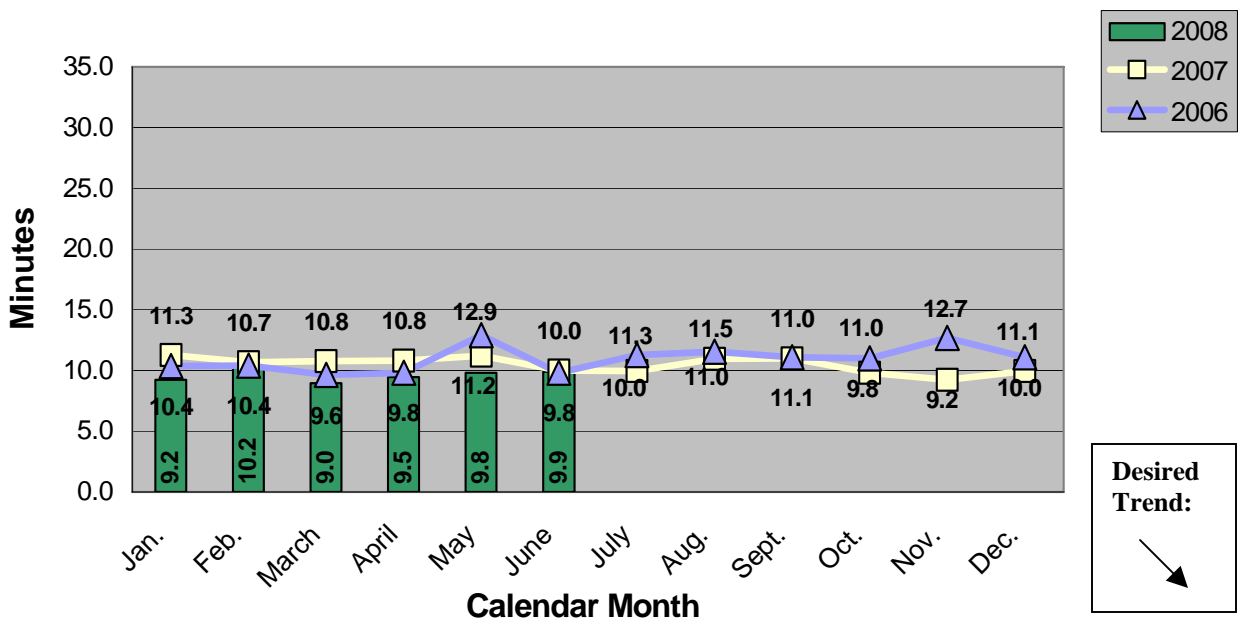
Renewed efforts in developing long-term partnerships with local agencies and law enforcement have increased the awareness of MoDOT’s expectations for quick clearance and open roadways.



### Average Time to Clear Traffic Backup From Incident St. Louis (Manual Observation)



### Average Time to Clear Traffic Backup From Incident Kansas City (Automated Observation)



## Uninterrupted Traffic Flow

### *Number of customers assisted by the Motorist Assist program*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Traffic Liaison Engineer

**Purpose of the Measure:**

This measure is used to gauge the use of the Motorist Assist programs on our state roadways, because traffic incidents impact Missouri's transportation system capacity. An incident is any unplanned event that creates a temporary reduction in roadway capacity that impedes normal traffic flow. The sooner an incident is removed, the sooner the highway system returns to normal capacity. Therefore, responding to and quickly addressing the incidents (crashes, flat tires and stalled vehicles) improves system performance. MoDOT's Motorist Assist operators are able to respond to nearly every incident, major or minor, in the areas they cover.

**Measurement and Data Collection:**

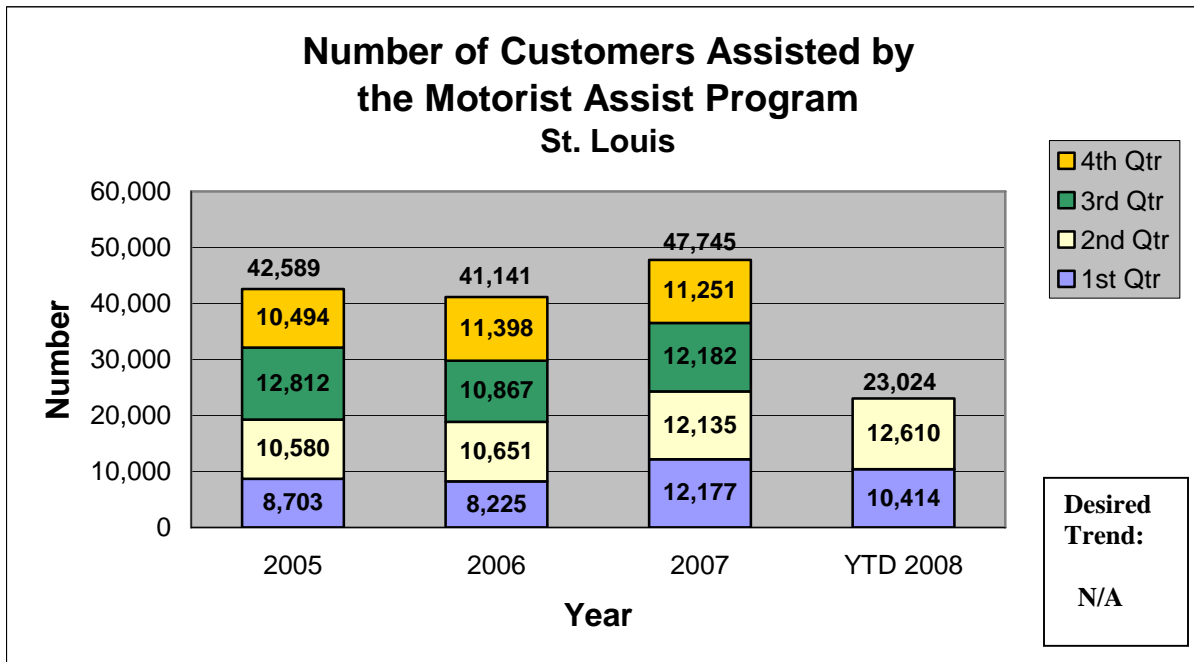
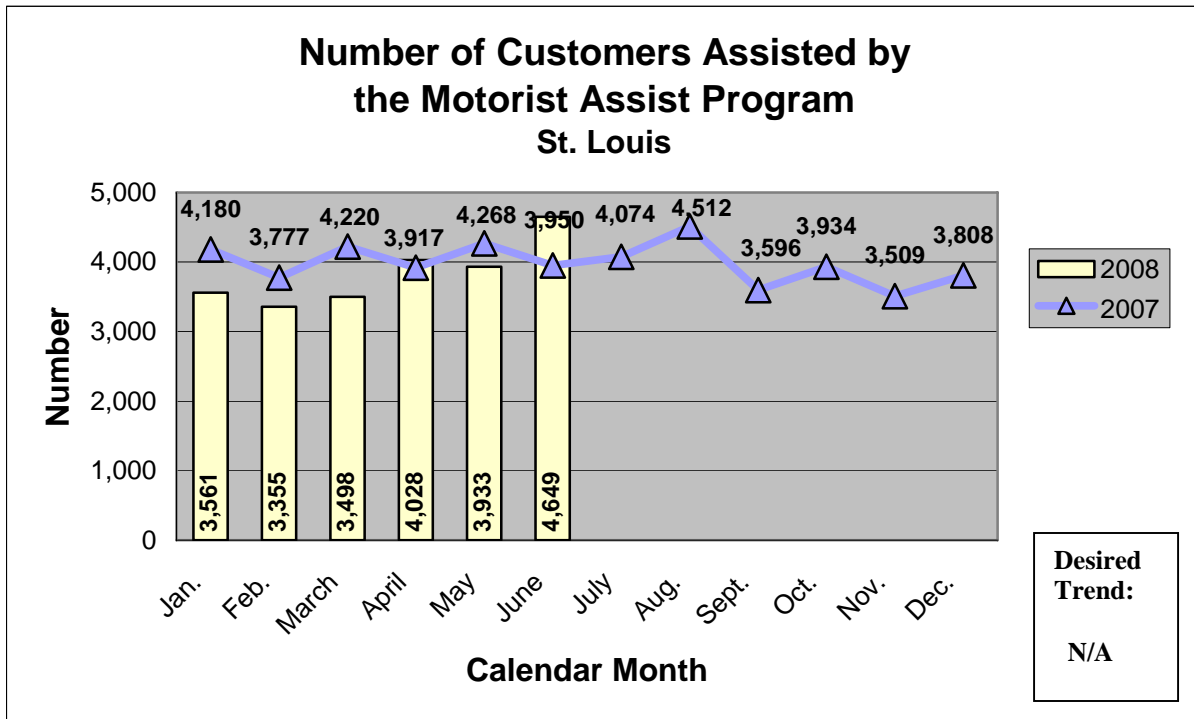
The Motorist Assist operators record each assist and then prepare a monthly summary. St. Louis operators patrol approximately 170 freeway miles, while Kansas City operators patrol approximately 105 freeway miles.

In January 2008, MoDOT partnered with St. Louis County to develop the Interstate 64 Traffic Response Service Patrol to ease congestion created by the reconstruction on the I-64 corridor. The I-64 Traffic Response Service Patrol provides similar services to motorists as the MoDOT Motorist Assist program on the arterials impacted by the closure of I-64. The I-64 Traffic Response Service Patrol records each assist and prepares a monthly report.

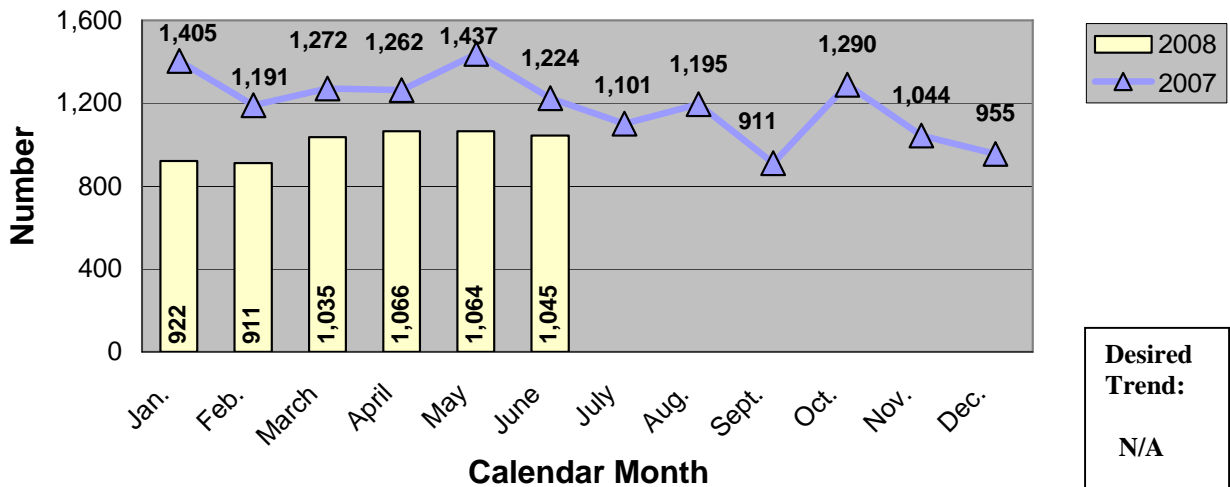
**Improvement Status:**

This data demonstrates that the Motorist Assist program in both St. Louis and Kansas City continue to provide motorists assistance on the urban freeways in both metropolitan areas. Typical patterns show increased assists during peak travel season and winter weather and decreased services in late summer and early fall.

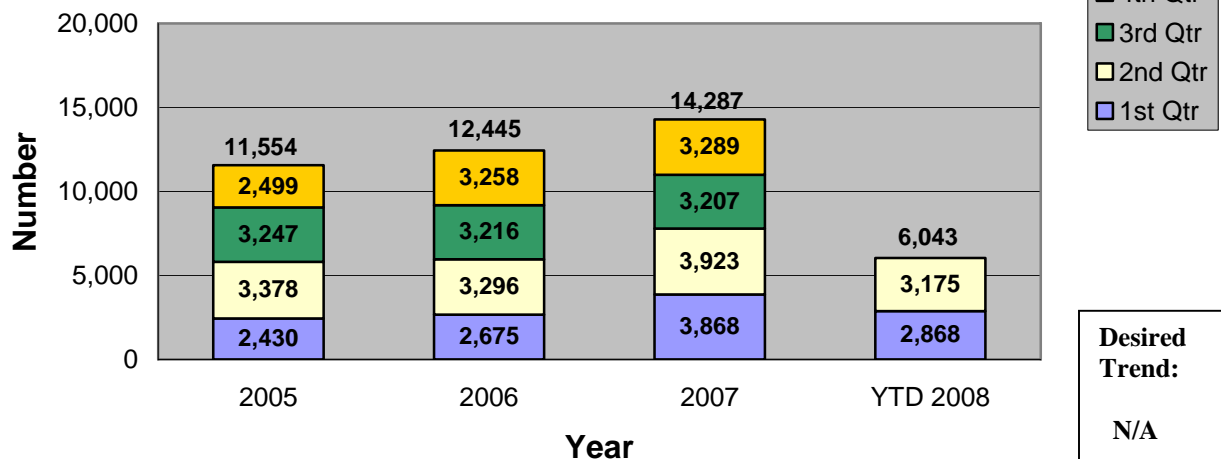
The reduction of assists in Kansas City is due to the reduction of secondary accidents that the region is seeing due to the ongoing efforts in incident management and coordination. Kansas City has also seen a reduction in long-term accidents while increasing their patrol area with the same amount of operators, which has reduced the number of times a roving patrol gets through a zone. An added emphasis on training and administrative responsibilities of the operators has provided better reporting and more accurate performance measures, but takes away from the time available to patrol the roadways.



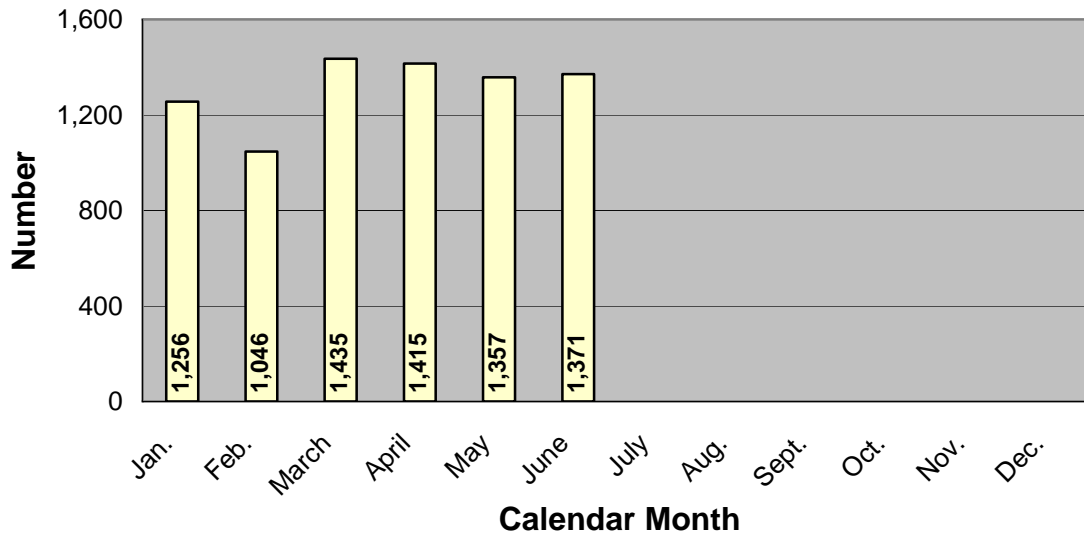
### Number of Customers Assisted by the Motorist Assist Program Kansas City



### Number of Customers Assisted by the Motorist Assist Program Kansas City



**Number of Customers Assisted by  
I-64 Traffic Response Service Patrol  
St. Louis**



**Desired  
Trend:**  
  
N/A

## Uninterrupted Traffic Flow

### *Percent of Motorist Assist customers who are satisfied with the service*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rick Bennett, Traffic Liaison Engineer

**Purpose of the Measure:**

This measure helps evaluate services provided through MoDOT's Motorist Assist Program, specifically, whether the customers who use the program are satisfied with the service. Information received provides direction on how to better serve our customers and keep traffic moving safely and efficiently.

**Measurement and Data Collection:**

Motorist Assist operators distribute survey cards to customers. Data from the cards is compiled and tabulated by Heartland Market Research, LLC. Surveys with selections identifying that the service was "probably" or "definitely" valuable were tabulated as "satisfied" for this measure.

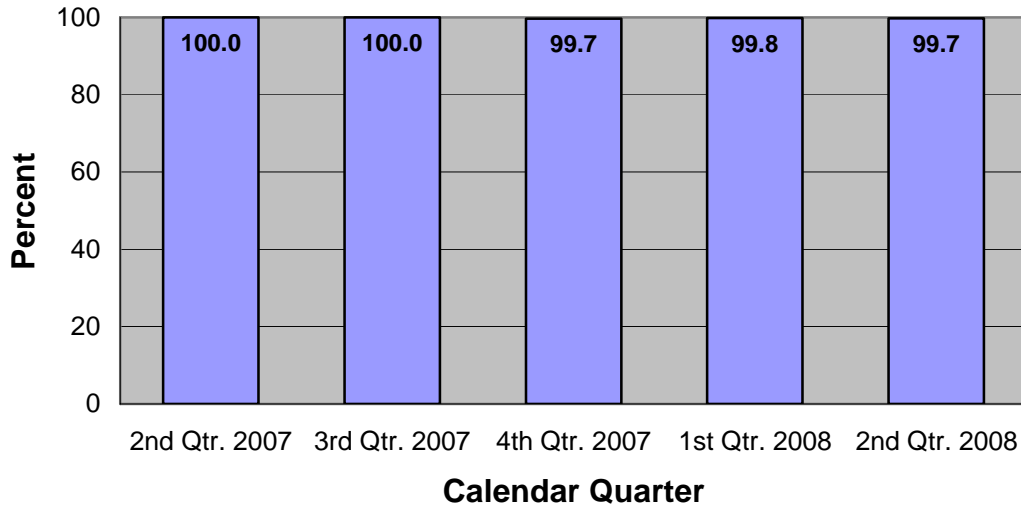
In January 2008, MoDOT partnered with St. Louis County to develop the Interstate 64 Traffic Response Service Patrol to ease congestion created by the reconstruction on the I-64 corridor. The I-64 Traffic Response Service Patrol provides similar services to motorists as the MoDOT Motorist Assist program, however, it patrols the arterials impacted by the closure of I-64. The I-64 Traffic Response Service Patrol distributes a separate but similar survey card to its customers.

**Improvement Status:**

This data agrees with information provided by customers on prior comment forms - almost all customers are satisfied.

- Second Quarter 2007, 548 surveys received
- Third Quarter 2007, 851 surveys received
- Fourth Quarter 2007, 688 surveys received
- First Quarter 2008,
  - 568 Motorist Assist surveys received
  - 119 I-64 Traffic Response surveys received
- Second Quarter 2008,
  - 1,117 Motorist Assist surveys received
  - 323 I-64 Traffic Response surveys received

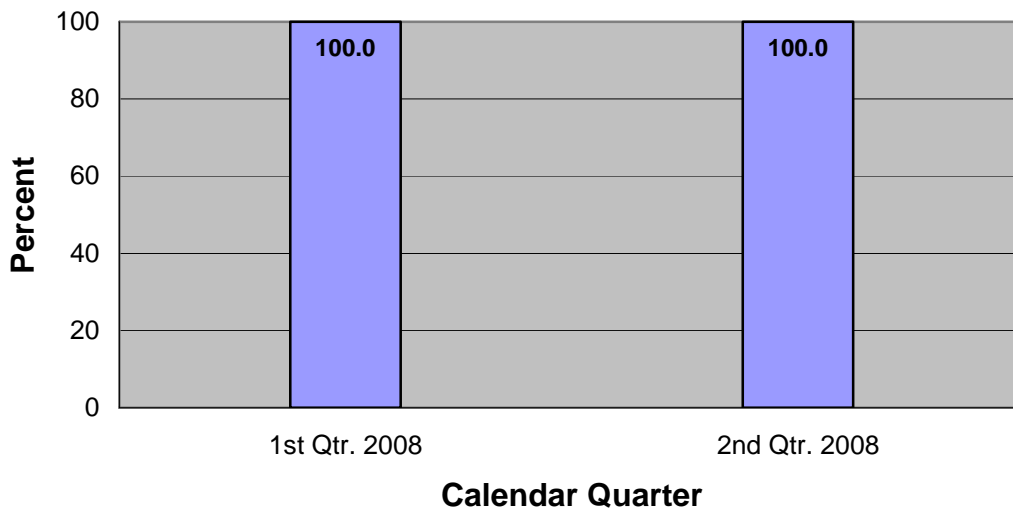
### Percent of Motorist Assist Customers Who Are Satisfied With the Service



Desired  
Trend:



### Percent of I-64 Traffic Response Service Patrol Customers Who Are Satisfied With the Service



Desired  
Trend:



## Uninterrupted Traffic Flow

### *Percent of work zones meeting expectations for traffic flow*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Dan Smith, Traffic Management & Operations Engineer

**Purpose of the Measure:**

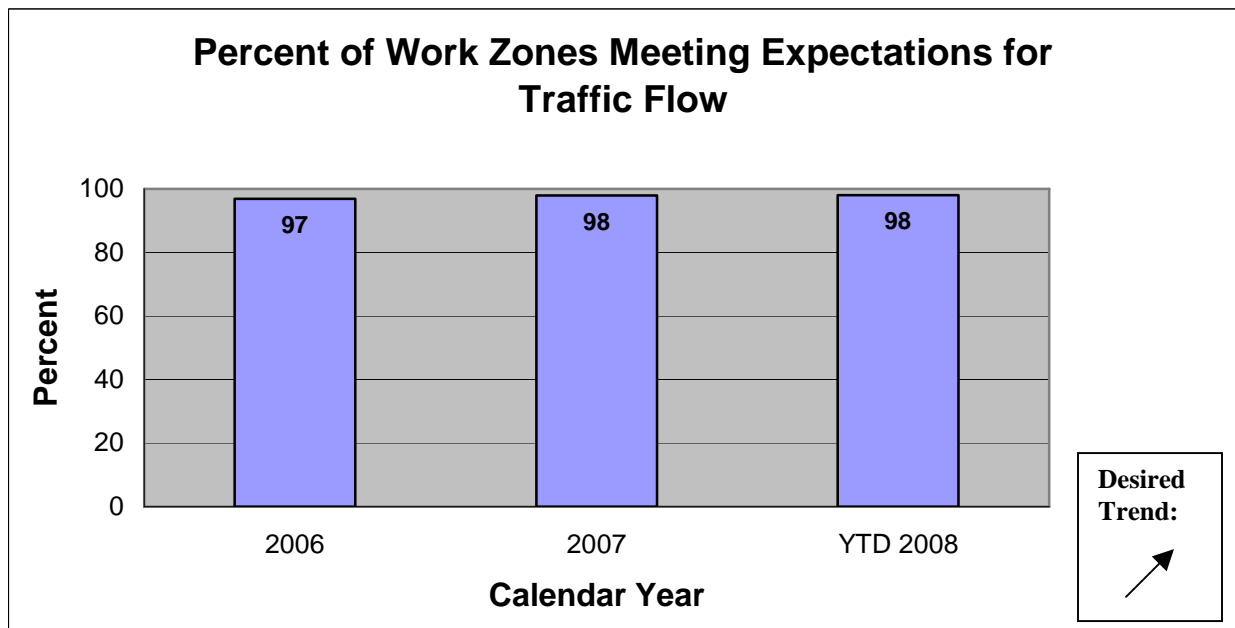
An important factor in evaluating the department's performance in temporary traffic control design, deployment, operation and maintenance is the measurement of work zones' affect on the mobility of highway users. This measure tracks how well the department meets customer expectations of traffic flow in, around and through work zones on state highways.

**Measurement and Data Collection:**

Using a formal inspection worksheet, Central Office and district employees evaluate mobility in work zones across the state. Each evaluation consists of a subjective assessment of engineered and operational factors affecting traffic flow. The evaluator assigns a pass, fail, or n/a rating to each of these individual factors and a pass or fail rating for their overall perception of traffic flow in, around and through the work zone. The overall perception ratings are compiled quarterly and reported via this measurement.

**Improvement Status:**

Compilation of the 1,636 evaluations performed by MoDOT staff between January and June of this calendar year resulted in a 98 percent satisfaction rating for work zone traffic flow (i.e., a negative perception of traffic flow was recorded in 2 percent of the evaluations). This rating is consistent with the previous calendar year's rating. Such progress is attributable to MoDOT's emphasis on creating exemplary work zones by minimizing work zone congestion and delays despite increased traffic demand and volume of work zones in Missouri.





## Uninterrupted Traffic Flow

### *Time to meet winter storm event performance objectives on major and minor highways*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Tim Jackson, Maintenance Liaison Engineer

**Purpose of the Measure:**

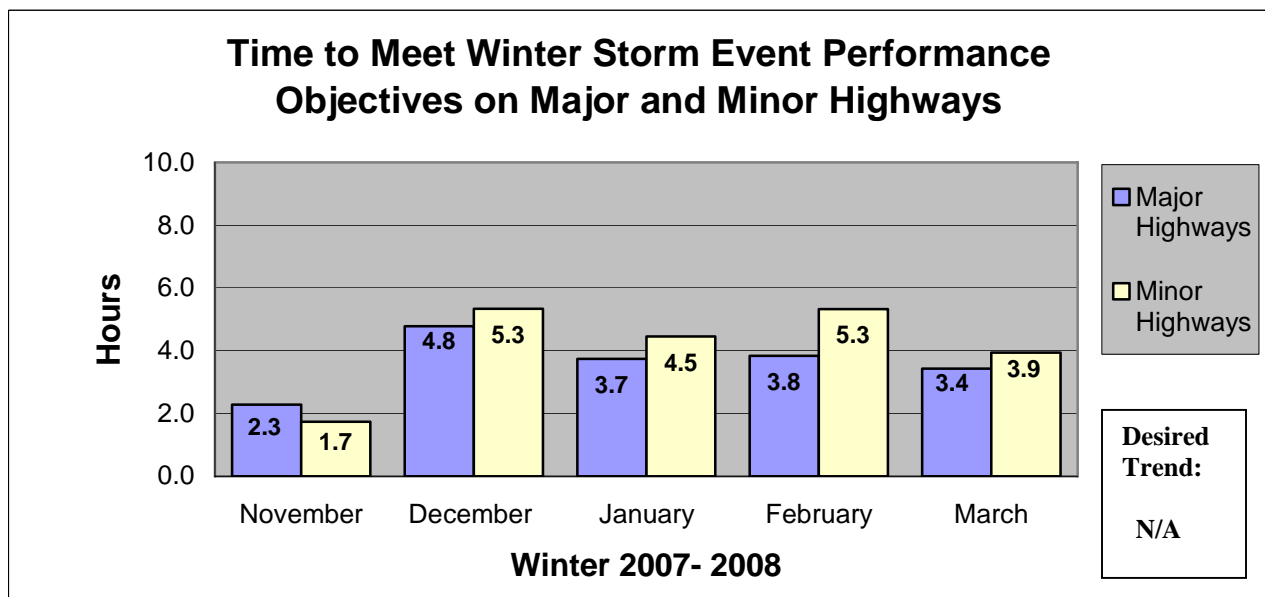
This measure tracks the amount of time needed to perform MoDOT's snow and ice removal efforts.

**Measurement and Data Collection:**

This data is collected in the winter event database. This measurement tracks the actual time involved in this process so improvements can be made. After each winter event, such as a snow or ice storm, area maintenance personnel submit a report indicating how much time it took to clear snow from the major and minor highways. Data collection for this measure runs from November through March of each winter season. After a storm ends, the objectives are to restore the major highways to a clear condition as soon as possible and have the lower-volume minor highways open to two-way traffic and treated with salt and/or abrasives at all critical areas such as intersections, hills and curves as soon as possible. The end of the storm is defined as when freezing precipitation stops accumulating on the roadways, either from falling or drifting conditions. This data is updated in the January and April Tracker reports. The time in hours is the statewide average for each month.

**Improvement Status:**

The average time to meet the performance objectives on the major highways varied from 3.4 to 4.8 hours over the reporting period. The average time to meet the performance objectives on the minor highways varied from 3.9 to 5.3 hours. February was the harshest month in terms of snowfall, which resulted in the slightly higher numbers for that month. The time to meet the performance objectives will vary based on the amount of snow received, the duration and the intensity of the storm. Strategies to improve these numbers include pursuing equipment enhancements, testing new materials and continued training of snow-removal employees.



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# Smooth and Unrestricted Roads and Bridges

*Tangible Result Driver – Kevin Keith,  
Chief Engineer*

MoDOT's customers have said they want smooth roads. Smoother roads mean less wear on vehicles, safer travel and greater opportunity for economic development. MoDOT will delight its customers by providing smooth and unrestricted roads and bridges. MoDOT recognizes that road projects built and maintained to a high standard of smoothness will be more efficient. MoDOT must provide customers with smooth roads – because everyone riding on a road can feel whether it is smooth or not!



## Smooth and Unrestricted Roads and Bridges

### *Projects that contribute to the Better Roads, Brighter Future program goal*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**

This measure tracks annually the miles of major highways in good condition compared to that required to reach the goal of 85 percent in good condition by the end of 2011 and the miles programmed in the STIP that contribute to this goal. In addition to the pavement goals, MoDOT has made improvements to the overall safety and appearance of these routes a priority. Therefore, in addition to pavement condition, this measure tracks miles of major highways that have a minimum 4-foot paved shoulder, an edge-line rumble stripe and a centerline rumble stripe where appropriate.

The Better Roads, Brighter Future (BRBF) program follows the 2005 completion of the Smooth Roads Initiative (SRI). BRBF will result in 85 percent of these major highways in good condition by the end of 2011.

**Measurement and Data Collection:**

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate System and most U.S. routes such as 63, 54 or 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO 740 (Stadium Blvd.) in Columbia and Route D (Page Ave.) in St. Louis.

The major roads in Missouri total approximately 5,573 centerline miles. This revised figure reflects additional mileage based on statewide review of the highway system. Good condition is defined using a combination of criteria. On high-speed routes (speed limits greater than 50 mph), the International Roughness Index (IRI) is used. For lower-speed routes (mostly urban areas) where smoothness is less critical, a Present Serviceability Rating (PSR) is used. While smoothness is a factor in PSR, physical condition is also a factor.

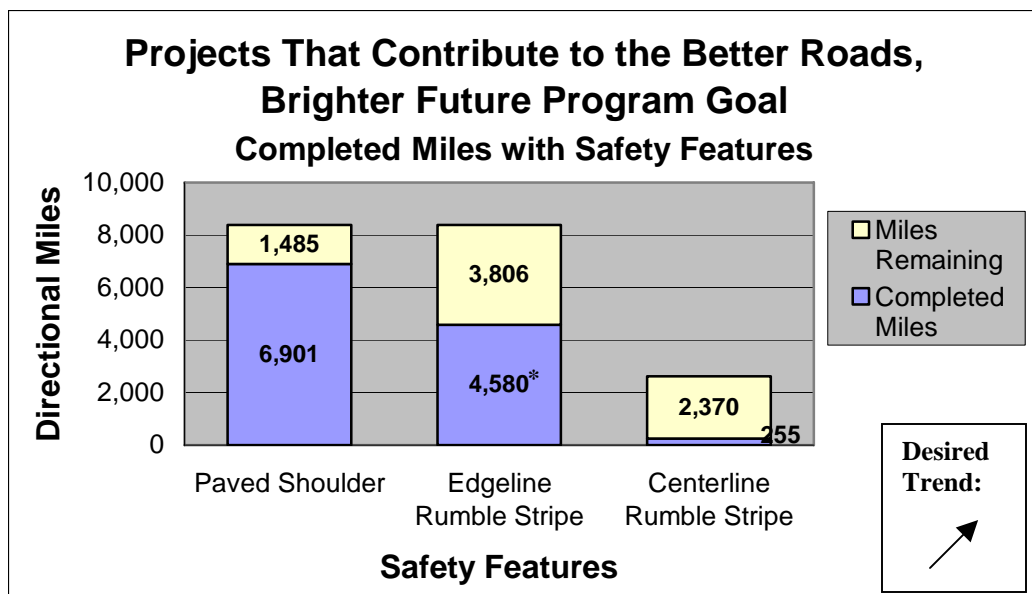
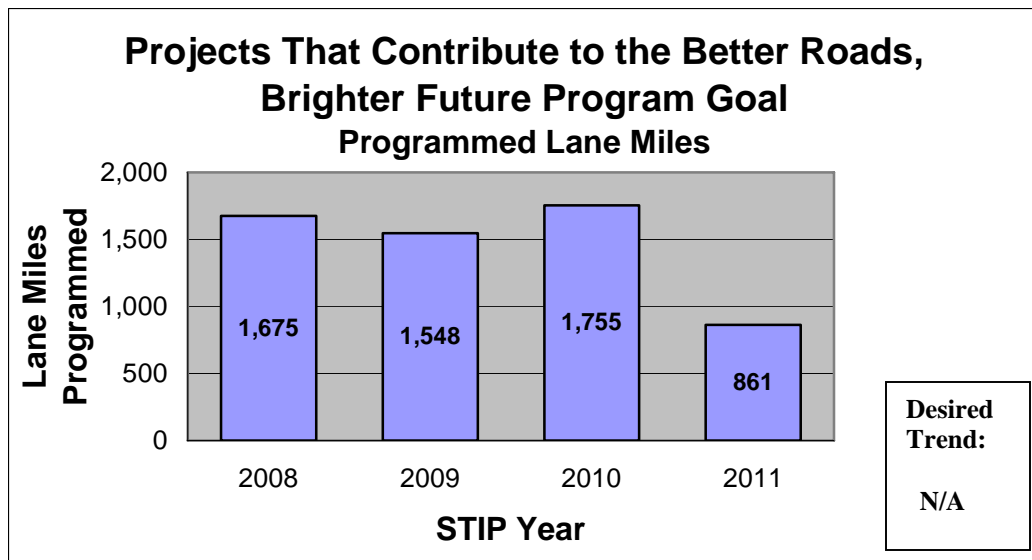
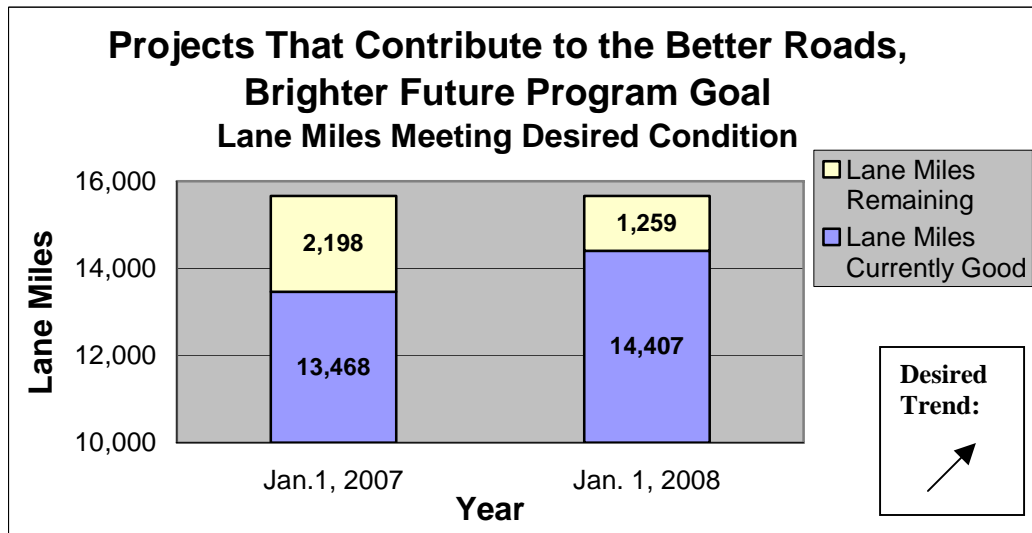
The overall progress and programmed work will be reported annually. Semi-annual updates of miles opened to traffic will be reported.

**Improvement Status:**

Completion of SRI resulted in a significant improvement in pavement condition. At the beginning of BRBF (January 2007), 74 percent of major highways were in good condition (as shown in 2b, Percent of major highways that are in good condition). By January 2008, 78 percent of major highways were in good condition.

Through the BRBF program, MoDOT will emphasize maintenance of the miles improved through SRI while making major improvements to the remainder of the 5,573 miles in the major highway system. By the end of 2011, a total of 85 percent of the major highways will have improved surfaces along with new or improved shoulders and rumble stripes. However, all 5,573 miles will benefit from safety features such as wider striping and brighter signing. There are currently more than 200 BRBF projects in the 2008-2012 Statewide Transportation Improvement Program that will address more than 1,900 major highway miles.

Funding for the BRBF program will come from existing Taking Care of System funds in accordance with the current funding allocation directed by the Missouri Highways and Transportation Commission. More than \$430 million per year is dedicated to taking care of the existing highway system.



## Smooth and Unrestricted Roads and Bridges

### *Percent of major highways that are in good condition*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**

This measure tracks the condition of Missouri's major highway road surfaces. The public has indicated the condition of Missouri's existing state roadway system should be one of the state's highest priorities. MoDOT places a high priority on improving the condition of state highways.

**Measurement and Data Collection:**

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate System and most U.S. routes such as 63, 54 or 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO 740 (Stadium Blvd.) in Columbia and Route D (Page Ave.) in St. Louis.

The major roads in Missouri total approximately 5,573 centerline miles. This figure reflects mileage based on statewide review of the highway system. Good condition is defined using a combination of criteria. On high-speed routes (speed limits greater than 50 mph), the International Roughness Index (IRI) is used. For lower-speed routes (mostly urban areas) where smoothness is less critical, a Present Serviceability Rating (PSR) is used. While smoothness is a factor in PSR, physical condition is also a factor.

Direct comparison to other states is difficult because of differences in measurement methodologies. However, a general order-of-magnitude comparison is possible given certain assumptions. For example, there are five states that report mileage for major highways within 10 percent of that maintained by MoDOT. Of these five, Georgia, with 5,875 miles, currently has the highest percentage of these highways classified in good condition based on smoothness only. The Missouri definition of good uses smoothness as one factor; however, it also includes other condition factors such as physical distress to determine quality. While the comparison is not exact, it does indicate the level of performance possible on a system of Missouri's size.

This is an annual measure. Missouri data is updated in January to reflect prior calendar-year ratings.

**Improvement Status:**

Completion of the Smooth Roads Initiative (SRI) has resulted in a significant improvement in pavement condition. Currently, 78 percent of the major highways are in good condition, up from 46 percent at the beginning of SRI in 2004.

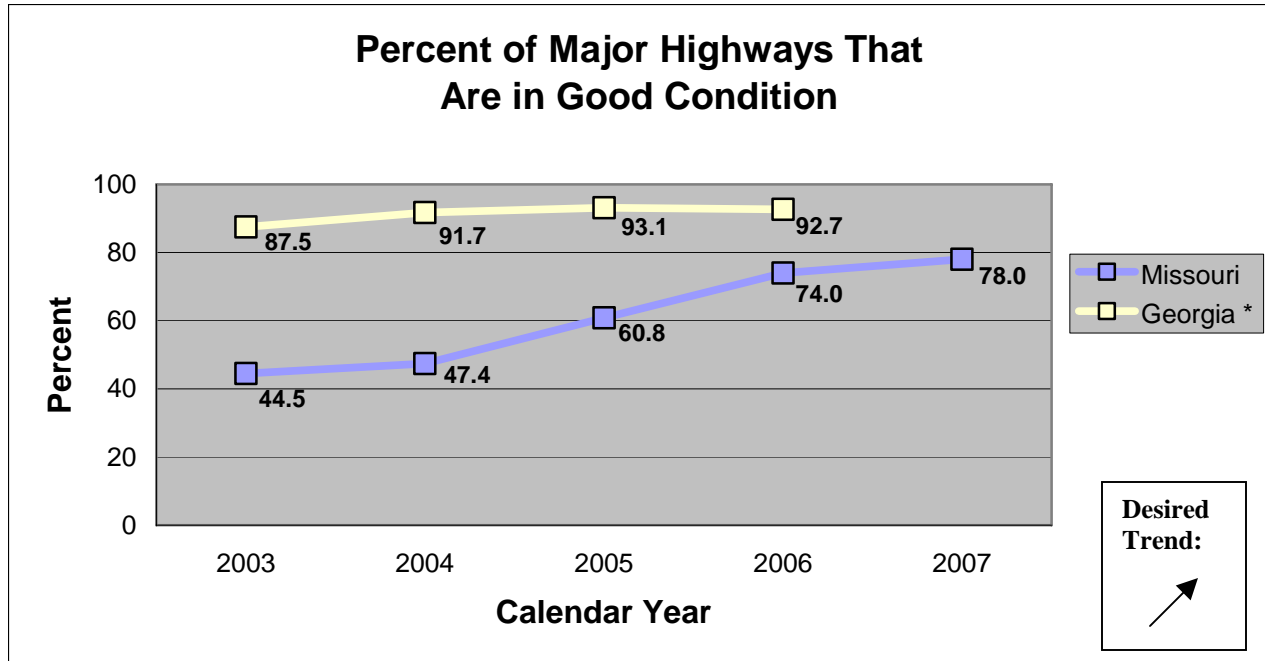
Through the Better Roads, Brighter Future (BRBF) program, MoDOT will emphasize maintenance of the miles improved through SRI while making major improvements to the remainder of the 5,573 miles in the major highway system. By the end of 2011, a total of 85 percent of the major highways will have improved surfaces along with new or improved shoulders and rumble stripes. However, all 5,573 miles will benefit from safety features such as wider striping and brighter signing. There are currently more than 200 BRBF projects in the 2007-2011 Statewide Transportation Improvement Program that will address more than 1,700 major highway miles.

Funding for BRBF will come from existing Taking Care of System funds in accordance with the current funding allocation directed by the Missouri Highways and Transportation Commission.

The Interstate System is the backbone of the major highway network. While it includes only about 7 percent of the state highway mileage, it accounts for more than half the total state vehicles miles traveled. During 2008, there is an

increased emphasis on maintenance and operation of interstate highways. The Interstate Maintenance Plan sets specific goals, standards and responsibilities for the condition of these vital highways.

More than \$430 million per year is dedicated to taking care of the existing highway system. Of this total, \$125 million is reserved for work on the Interstate System and major bridges.



\* Source data for Georgia is "Highway Statistics" published by FHWA. Data for 2007 not available at time of publication. Georgia data is based only on pavement smoothness (IRI) submitted as part of the Highway Performance Monitoring System.



## Smooth and Unrestricted Roads and Bridges

### *Percent of minor highways that are in good condition*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**

This measure tracks the condition of Missouri's minor highway road surfaces. The public has indicated the condition of Missouri's existing state roadway system should be one of the state's highest priorities. MoDOT places a high priority on improving the condition of highways in the state system.

**Measurement and Data Collection:**

The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes mainly serve local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads. The minor roads in Missouri total approximately 27,000 centerline miles.

Good condition is defined using a combination of criteria. Where available, on high-speed routes (speed limits greater than 50 mph) the International Roughness Index (IRI) is used. For lower-speed routes where smoothness is less critical, a Present Serviceability Rating (PSR) or IRI is used. While smoothness is a factor in PSR, physical condition is also a factor.

Direct comparison to other states is difficult because of differences in measurement methodologies. However, a general order-of-magnitude comparison is possible given certain assumptions. For example, there are six states that report mileage for minor highways within 10 percent of that maintained by MoDOT. Of these six, Georgia, with 24,707 miles, currently has the highest percentage of these highways classified in good condition. The ratings reported by states as part of the Highway Performance Monitoring System for roads classified as minor more closely relate to Missouri's rating system.

Federal Highway Administration allows conditions on minor highways to be reported on either IRI or Present Serviceability Index (PSI). PSI includes an assessment of physical distress similar to Missouri's definition. The Missouri definition of good uses smoothness as one factor. However, it also includes other condition factors such as physical distress to determine quality.

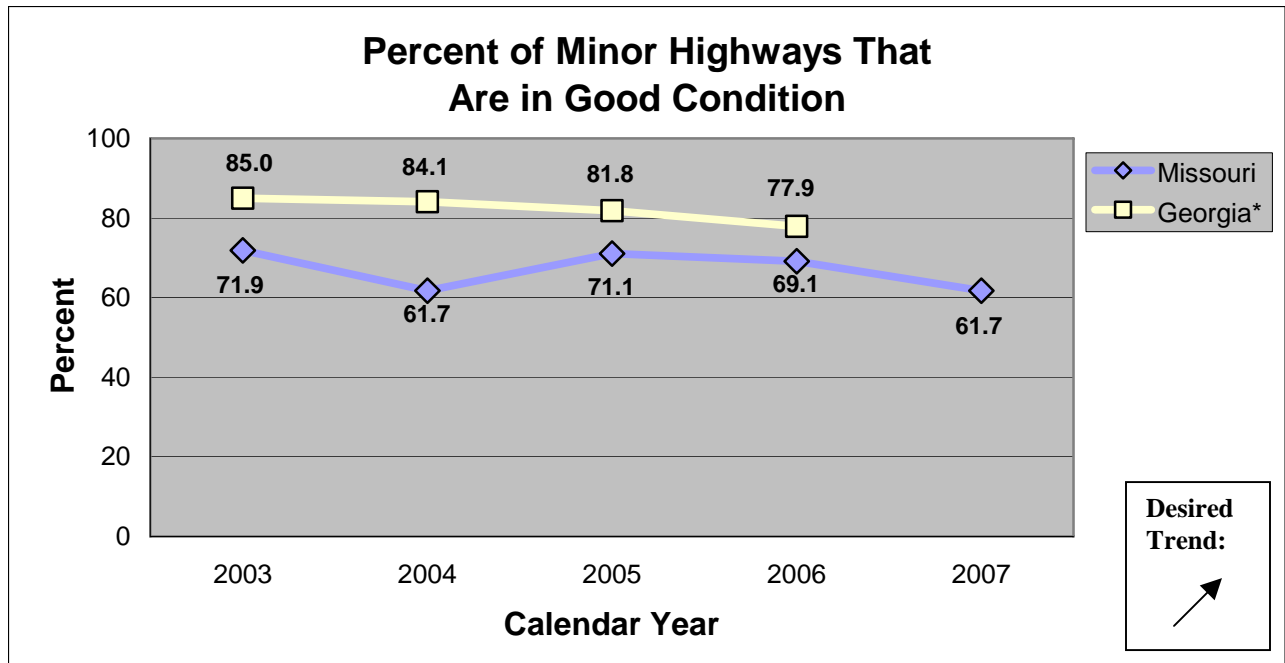
This is an annual measure. Missouri data is updated in January to reflect prior calendar-year ratings.

**Improvement Status:**

Through the Better Roads, Brighter Future program, MoDOT has identified the major highway system as a priority for the next five years. Efforts on the minor highways will emphasize maintenance of this system at or near the current levels. Work on minor highways will emphasize the use of MoDOT maintenance forces and will consist of treatments that include routine patching, crack sealing and chip seals.

Minor highways have shown a marked decline in condition in the last two years. Some of this is due to the change from a subjective rating method to an automated procedure. However, some of the decrease is due to a change in treatments used on minor roads. The chip seal program is designed to stabilize and maintain pavements in good condition, rather than improve pavements in poor condition. While this slows the deterioration of good minor roads, it does not provide a substantial decrease in miles of poor pavement. An issue with the current method of measurement has also been identified. While a road treated with a chip seal and improved striping may look good, smoothness is not necessarily improved. Smoothness is currently a major factor in the determination of good condition.





\* Source data for Georgia is "Highway Statistics" published by the Federal Highway Administration. Georgia data for 2007 was not available at time of publication. Data is based on a combination of pavement smoothness – IRI or PSI – as submitted as part of the Highway Performance Monitoring System.

## Smooth and Unrestricted Roads and Bridges

### *Percent of vehicle miles traveled on major highways in good condition*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**

This measure tracks the percent of vehicle miles traveled (VMT) on Missouri's major highway system that take place on highways in good condition. The public has indicated the condition of Missouri's existing state roadway system should be one of the state's highest priorities. Emphasizing work on the major highway system insures that the majority of travel takes place on highways in good condition.

**Measurement and Data Collection:**

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the interstate system and most U.S. routes such as 63, 54 or 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO 740 (Stadium Blvd.) in Columbia and Route D (Page Ave.) in St. Louis.

The major roads in Missouri total approximately 5,573 centerline miles. Good condition is defined using a combination of criteria. On high-speed routes (speed limits greater than 50 mph) the International Roughness Index (IRI) is used. For lower-speed routes (mostly urban areas) where smoothness is less critical, a Present Serviceability Rating (PSR) is used. While smoothness is a factor in PSR, physical condition is also a factor.

VMT is determined by multiplying the traffic volume on a given route by the route length. For this measure, the VMT is calculated on those routes in good condition and then divided by the total VMT for major routes to determine the percentage shown below. While the system of major highways in Missouri comprise only about 17 percent of the total system mileage, it carries more than 75 percent of all traffic on the state highway system.

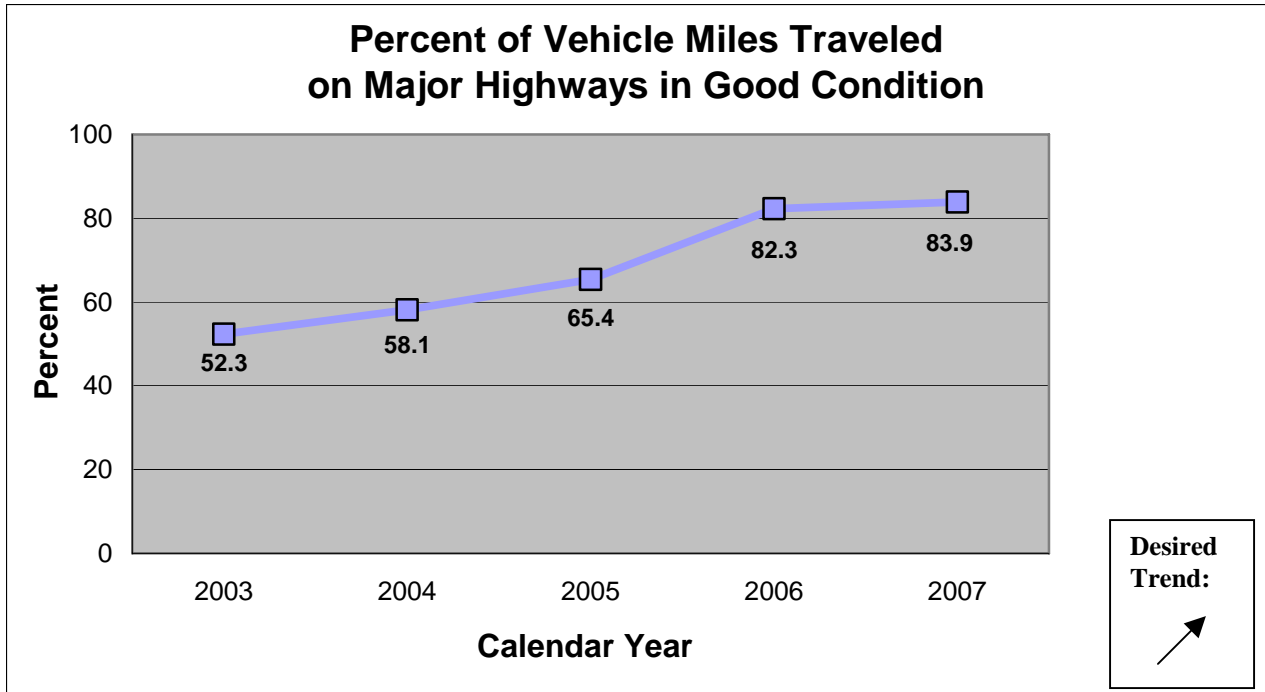
This is an annual measure that is updated each January.

**Improvement Status:**

Completion of the Smooth Roads Initiative (SRI) has resulted in a significant improvement in pavement condition. Through the Better Roads, Brighter Future program, MoDOT will continue maintenance of the miles improved through SRI while making major improvements to the remainder of the 5,573 miles in the major highway system.

The condition of the major roads has continued to improve. Seventy-eight percent of major roads are presently in good condition. VMT has shown slight growth in the past several years. At this time, nearly 84 percent of all travel on major highways takes place on highways in good condition. Continuing to emphasize work on the major highway system ensures that the majority of public travel takes place on highways in good condition.

More than \$430 million per year is dedicated to taking care of the existing highway system. Funding for the Better Roads, Brighter Future program will come from existing Taking Care of System (TCOS) funds in accordance with the current funding allocation directed by the Missouri Highways and Transportation Commission.



## Smooth and Unrestricted Roads and Bridges

### *Percent of deficient bridges on major highways*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Dennis Heckman, State Bridge Engineer

**Purpose of the Measure:**

This measure tracks progress toward improving the condition of Missouri's bridges on major highways. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

**Measurement and Data Collection:**

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate System or most U.S. routes such as 63, 54 or 36.

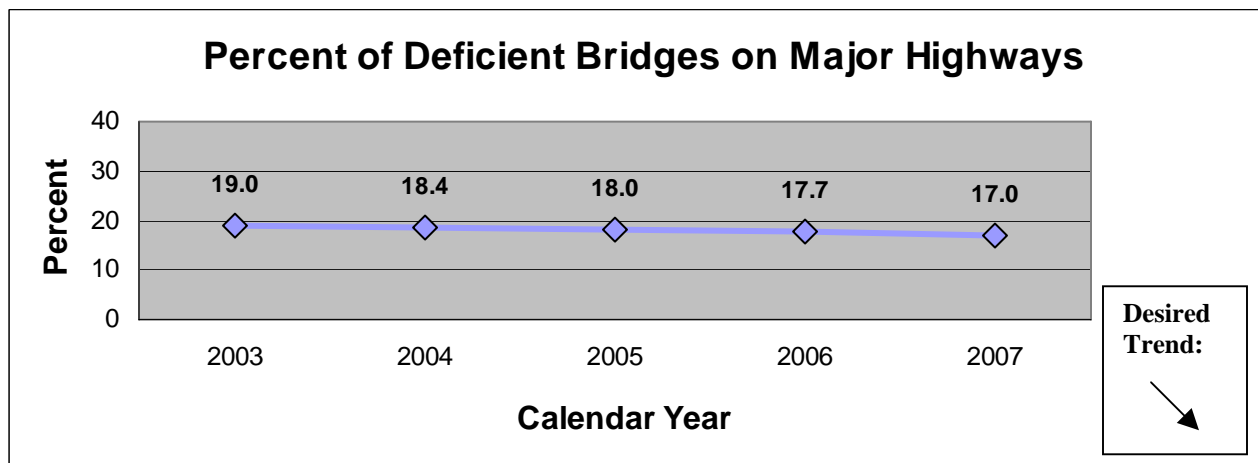
In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO 740 (Stadium Blvd.) in Columbia and Route D (Page Ave.) in St. Louis.

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges. There are currently 3,364 bridges on major highways. This is an annual measure and data is updated each April based on the prior year's inspections.

**Improvement Status:**

Bridge conditions on major highways have shown a moderate improvement. The percentage of deficient bridges has been reduced from 19 percent to 17 percent over the last five years as a result of increased funds directed to care for the existing highway system.

The Safe & Sound bridge improvement program will address more than 800 of the state's most critical structures. This program will repair or replace these bridges over a five-year period and emphasize their maintenance at an acceptable level for an additional 25 years. While most of these bridges are located on the minor highway system, a small benefit to bridges on major highways is also anticipated (0.5 percent drop in this measure).



## Smooth and Unrestricted Roads and Bridges

### *Percent of deficient bridges on minor highways*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Dennis Heckman, State Bridge Engineer

**Purpose of the Measure:**

This measure tracks progress toward improving the condition of Missouri's minor highway bridges. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

**Measurement and Data Collection:**

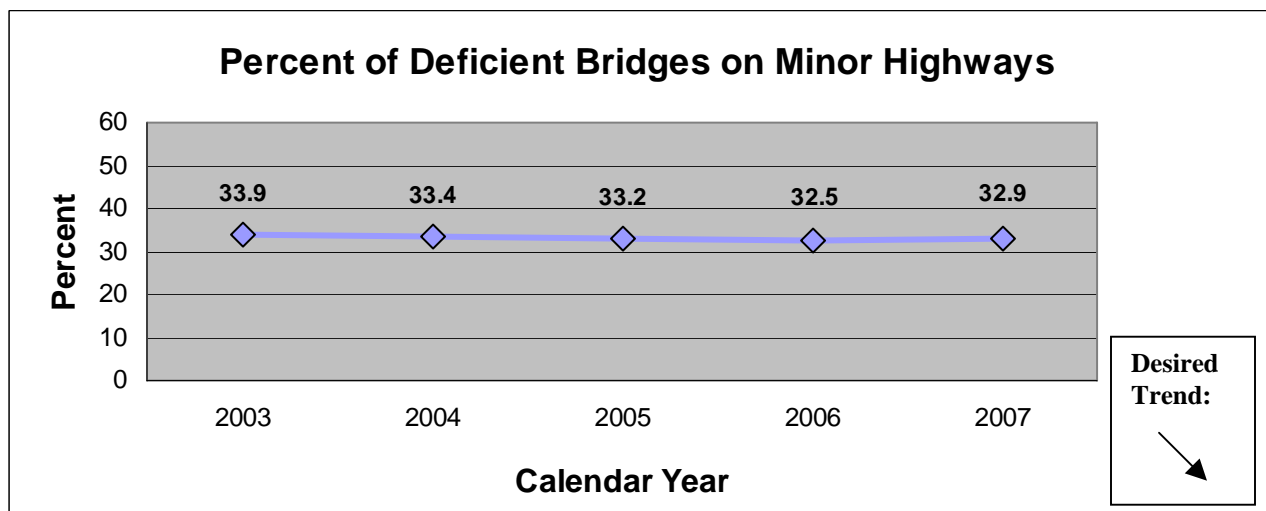
The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes serve more local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads.

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges. There are currently 6,912 bridges on minor highways. This is an annual measure and data is updated each April based on the prior year's inspections.

**Improvement Status:**

Bridge conditions on minor highways have taken a small step backward. While the percentage of deficient bridges has been reduced from 33.9 percent to 32.9 percent over the last five years, this percentage actually increased slightly from 2006 to 2007.

The strategy to improve this measure is the Safe & Sound bridge improvement program, which has been in an active procurement process for the last year-and-a-half. This program will repair or replace over 800 bridges over a five-year period and emphasize their maintenance at an acceptable level for an additional 25 years. Most of these bridges are located on the minor highway system. A decrease in the number of deficient bridges is expected to occur with the completion of this program. However, due to the accelerating rate of bridges becoming deficient, there still will be a sizable number of deficient bridges on the system. It is projected that this measure will drop to 30.0 percent at the completion of the Safe & Sound bridge improvement program.



## Smooth and Unrestricted Roads and Bridges

### *Number of deficient bridges on the state system (major and minor highways)*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Dennis Heckman, State Bridge Engineer

**Purpose of the Measure:**

This measure tracks progress toward improving the condition of Missouri's bridges. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

**Measurement and Data Collection:**

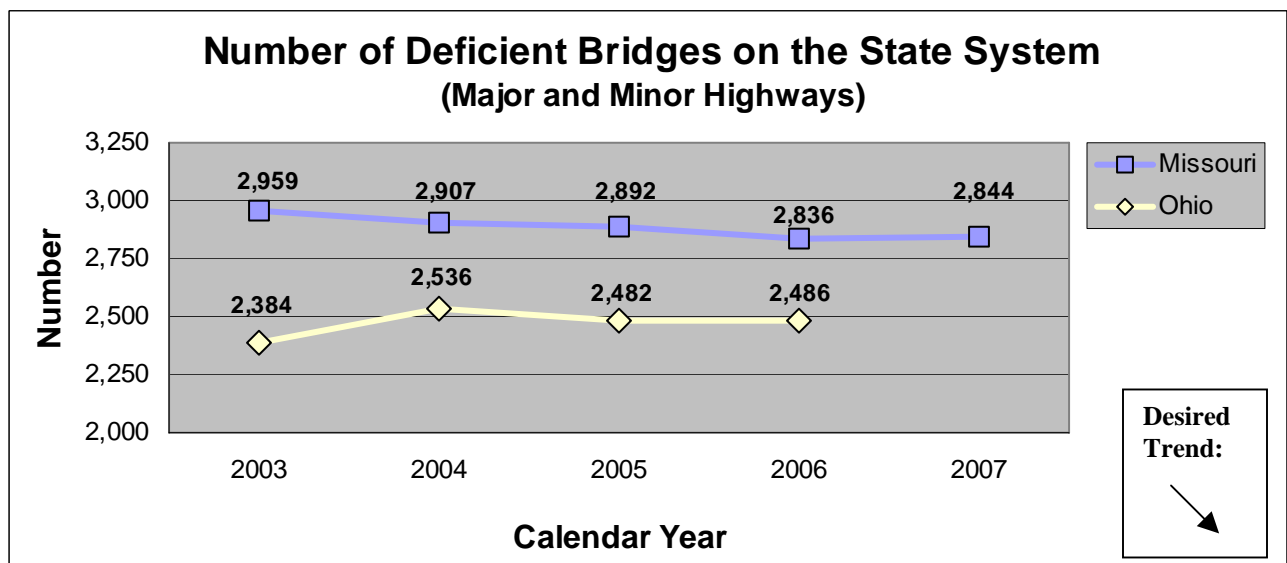
A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges. There are currently a total of 10,276 bridges on the state highway system.

This is an annual measure and data is taken from the National Bridge Inventory. Missouri data is available in April of each calendar year and is updated in the April Tracker. The data for other states is not published until the following year.

**Improvement Status:**

Bridge conditions on Missouri highways have taken a small step backward. While the number of deficient bridges on the state system has been reduced from 2,959 to 2,844 over the last five years, this number actually increased slightly from 2006 to 2007. Of the 2,844 deficient bridges, 1,179 are FO and 1,665 are SD.

The strategy to improve this measure is the Safe & Sound bridge improvement program that will repair or replace more than 800 of the state's most critical structures over a five-year period and emphasize their maintenance at an acceptable level for an additional 25 years. A decrease in the number of deficient bridges is expected with the completion of this program. However, due to the accelerating rate of bridges becoming deficient, there still will be a sizable number of deficient bridges on the system. It is projected that this measure will drop to 2,500 at the completion of the Safe & Sound bridge improvement program.



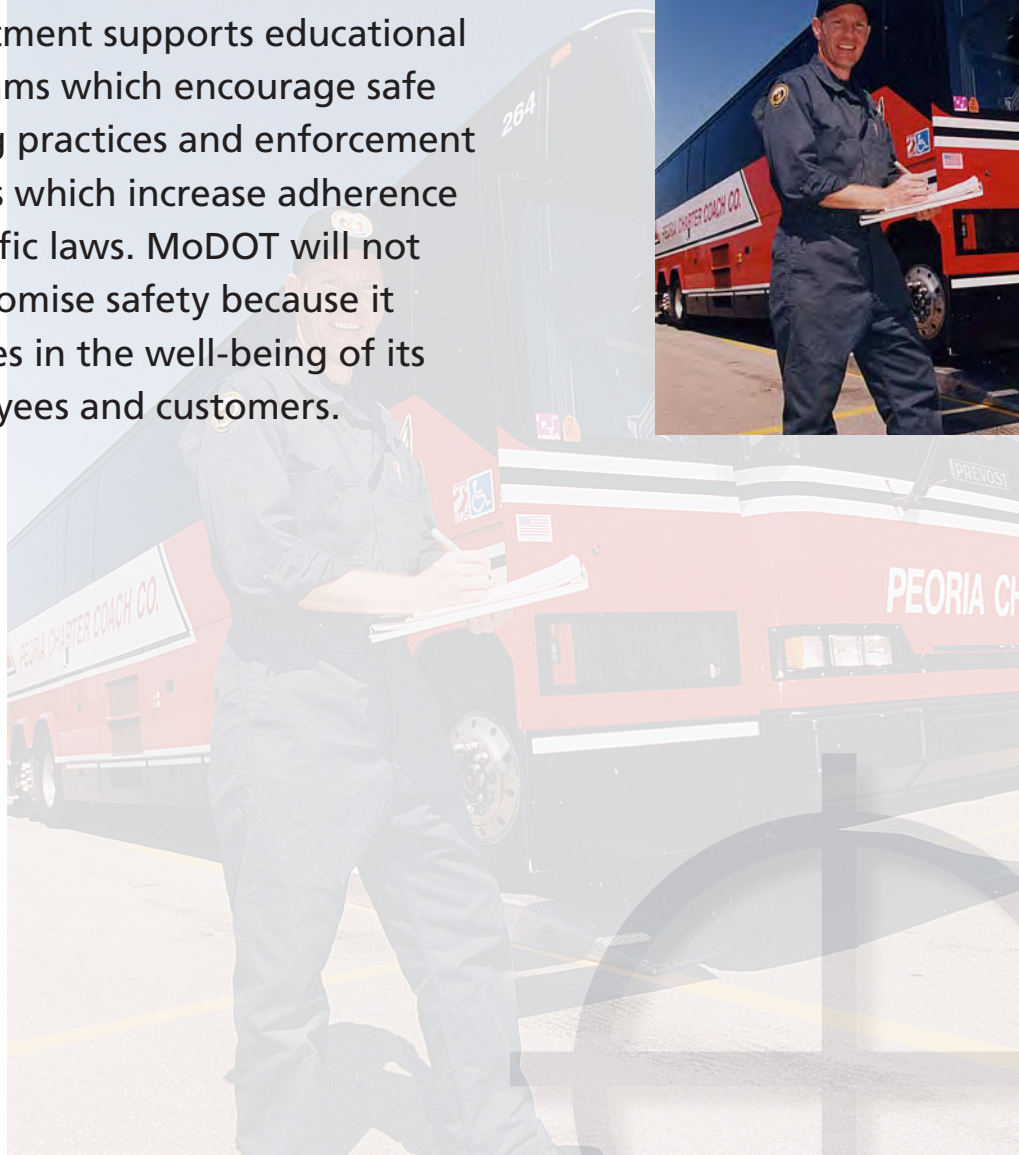
\* Source for Ohio, "Better Bridges" November 2007, for data collected in calendar year 2006.

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# Safe Transportation System

*Tangible Result Driver – Don Hillis,  
Director of System Management*

MoDOT works closely with other safety advocates to make our roads and work zones safer. The department supports educational programs which encourage safe driving practices and enforcement efforts which increase adherence to traffic laws. MoDOT will not compromise safety because it believes in the well-being of its employees and customers.





## Safe Transportation System

### *Number of fatalities and disabling injuries*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

#### **Purpose of the Measure:**

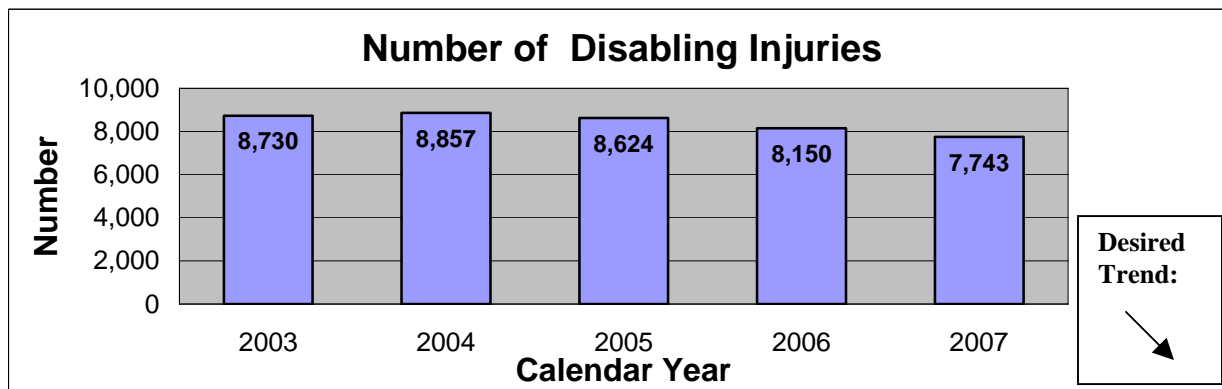
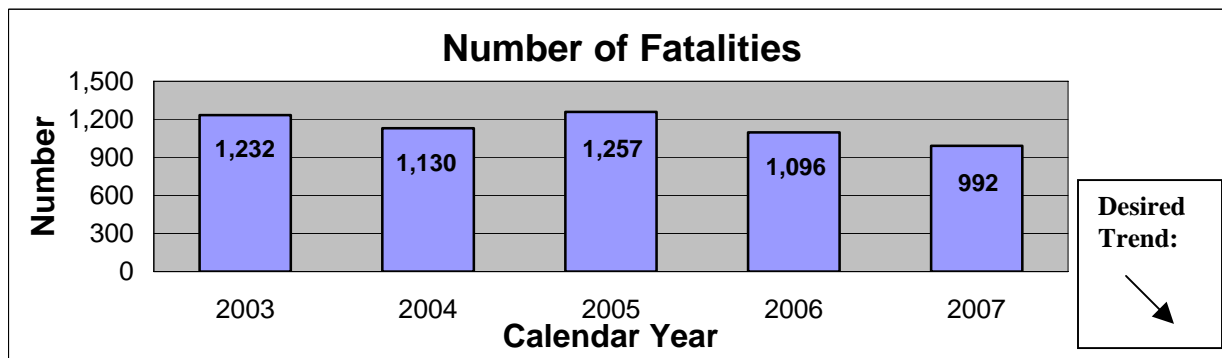
This measure tracks annual trends in fatal and disabling injuries resulting from traffic crashes on all Missouri roadways. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports the Missouri Blueprint for Safer Roadways. This document identifies the statewide initiatives with a goal of reducing fatalities to 1,000 or fewer by 2008.

#### **Measurement and Data Collection:**

Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Data is collected on an annual basis and is updated in July of the following year.

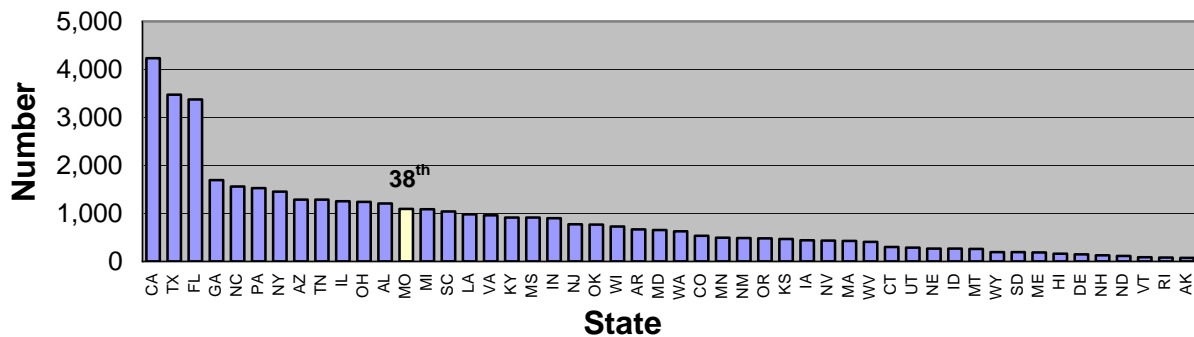
#### **Improvement Status:**

Fatalities decreased by 10 percent in 2007 in a continued downward trend since 2005. Missouri has not been under 1,000 fatalities since 1993. The 992 fatalities in 2007 means the Missouri Coalition for Roadway Safety can celebrate accomplishing their goal of 1,000 or fewer fatalities by 2008. Disabling injuries continue to show a decreasing trend with a reduction of over 400 when compared to the 2006 number. The national data comparison shows that Missouri moved from 40<sup>th</sup> in 2005 to 38<sup>th</sup> in 2006 for total fatalities. The 2007 comparison is not yet available. Fatalities and disabling injuries are decreasing due in part to engineering enhancements such as three-strand guard cable, rumble strips and enhanced delineation. Also contributing are strong safety belt public information campaigns combined with increased law enforcement participation in statewide campaigns.

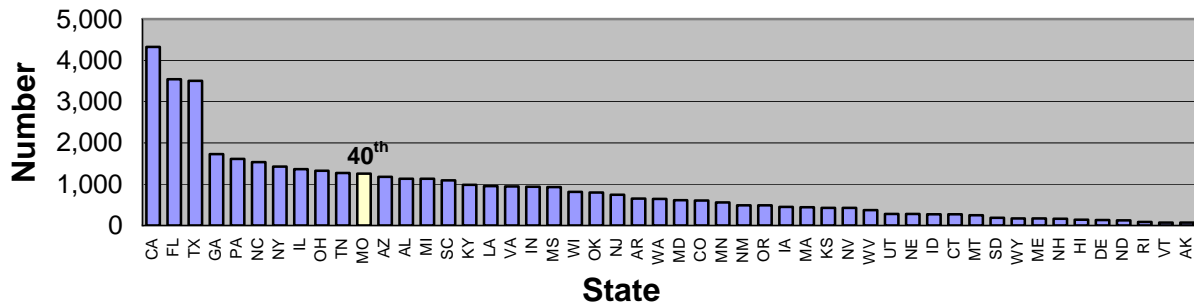




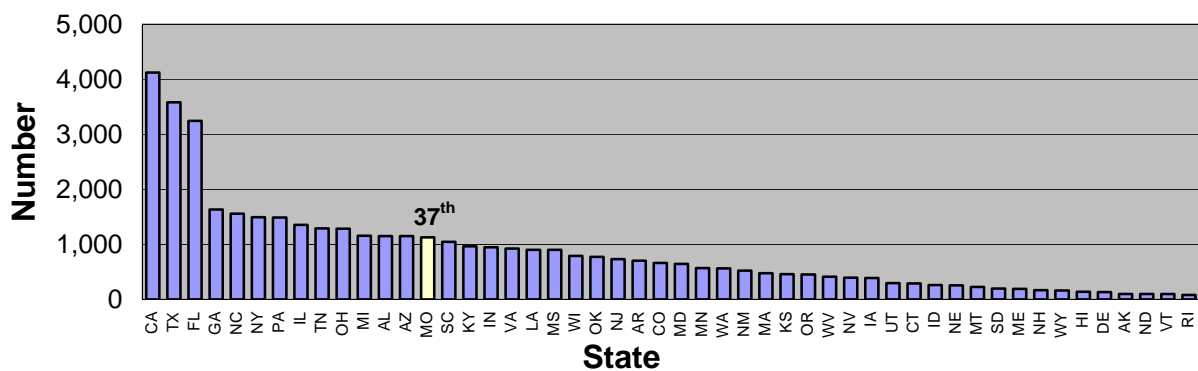
### Missouri 's National Ranking by Total Number of Fatalities 2006



### Missouri 's National Ranking by Total Number of Fatalities 2005



### Missouri's National Ranking by Total Number of Fatalities 2004



## Safe Transportation System

### *Number of impaired driver-related fatalities and disabling injuries*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**

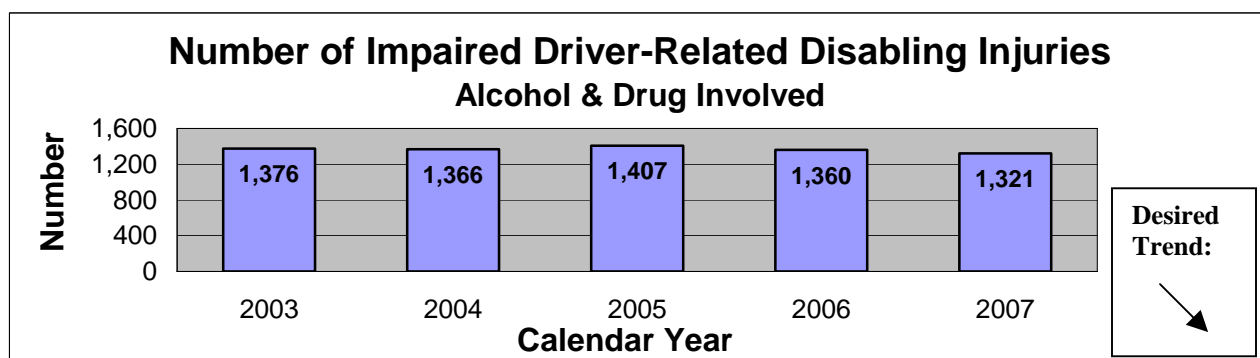
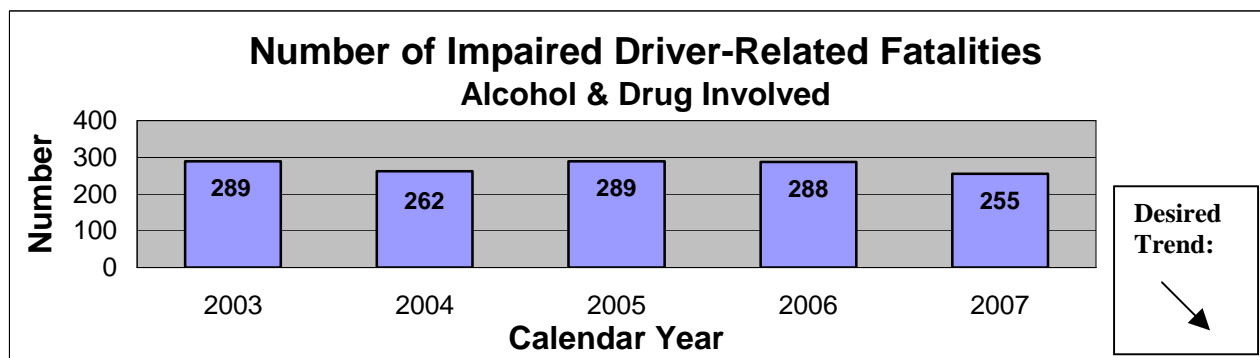
This measure tracks annual trends in fatalities and injuries resulting from traffic crashes on all Missouri roadways involving drivers who are impaired by alcohol and/or drugs. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports the Missouri Blueprint for Safer Roadways. This document identifies the statewide initiatives with a goal of reducing fatalities to 1,000 or fewer by 2008.

**Measurement and Data Collection:**

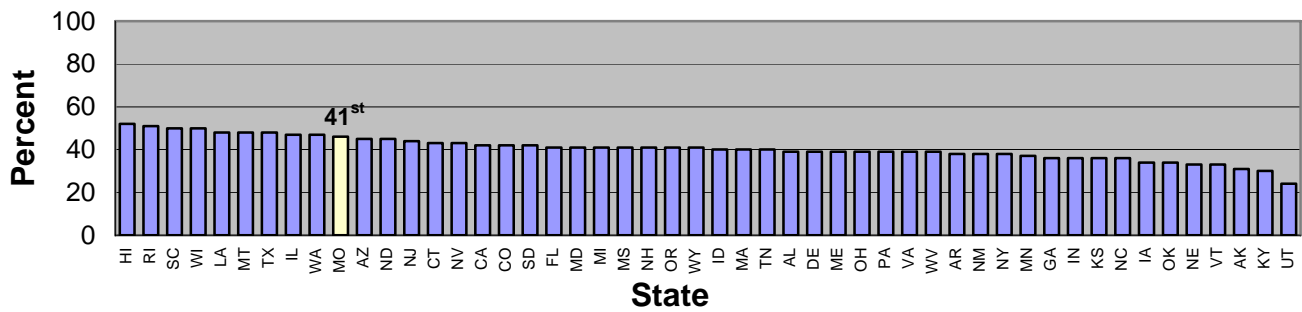
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Data is collected on an annual basis and is updated in July of the following year.

**Improvement Status:**

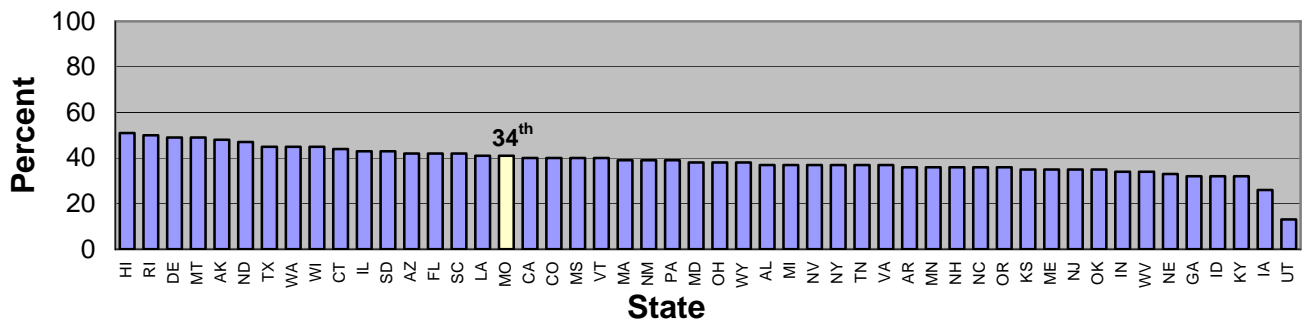
Alcohol- and drug-related fatalities and disabling injuries decreased in both 2006 and 2007. In the national comparison for 2006, Missouri moved away from the desired downward trend in percent of persons killed in alcohol-related crashes. The 2007 comparison is not yet available. In addition to Missouri participating in the national "You Drink and Drive, You Lose" campaign, the Missouri Law Enforcement Traffic Safety Advisory Council selected specific days to increase law enforcement activity through December 2008. Public information and education has been directed at high-risk drivers ages 21 to 35. Law enforcement efforts have been concentrated on high-crash corridors and increasing the number of sobriety checkpoints. These efforts have helped reduce impaired driving crashes overall and have started a downward trend in fatalities and disabling injuries. An increasing number of people who work in liquor establishments are completing the online server training modules that were first developed three years ago.



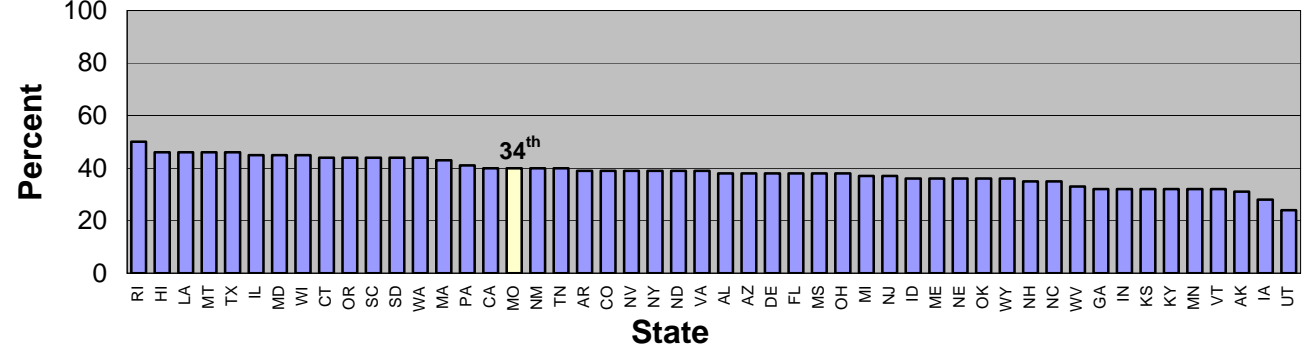
### Missouri's National Ranking by Percent Killed in Alcohol-Related Crashes 2006



### Missouri's National Ranking by Percent Killed in Alcohol-Related Crashes 2005



### Missouri's National Ranking by Percent Killed in Alcohol-Related Crashes 2004



## Safe Transportation System

### *Rate of annual fatalities and disabling injuries*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**

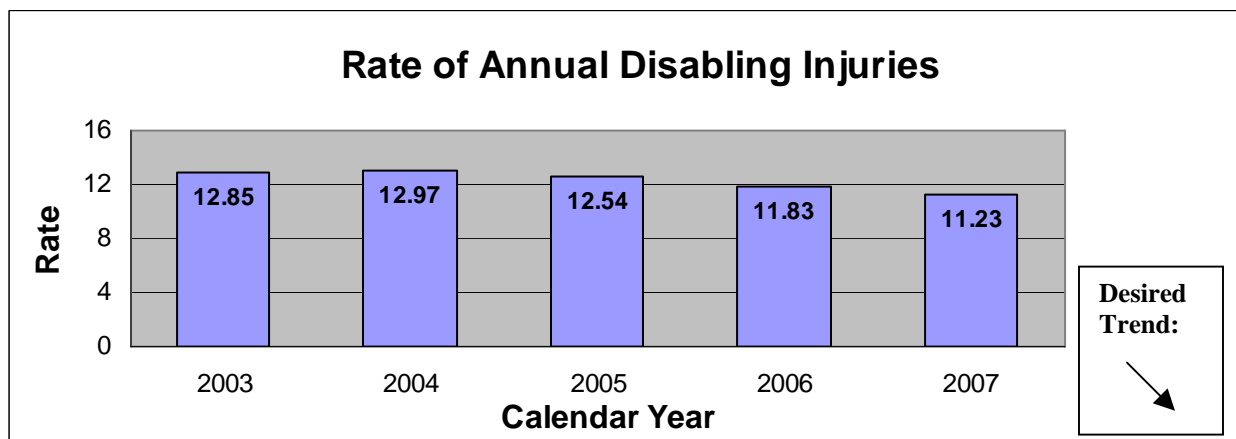
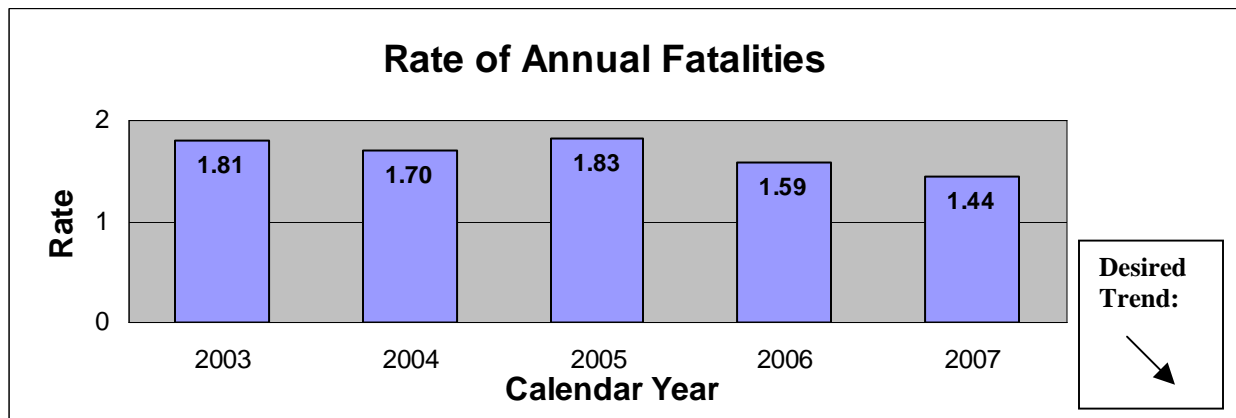
This measure tracks annual trends in fatal and disabling injury rates per 100 million vehicle miles traveled (HMVM) in Missouri. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports the Missouri Blueprint for Safer Roadways. This document identifies the statewide initiatives with a goal of reducing fatalities to 1,000 or fewer by 2008.

**Measurement and Data Collection:**

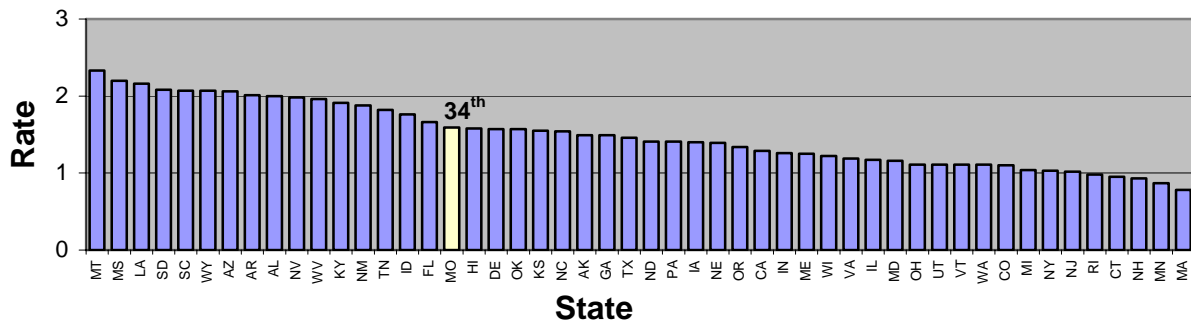
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Data is collected on an annual basis and is updated in July of the following year.

**Improvement Status:**

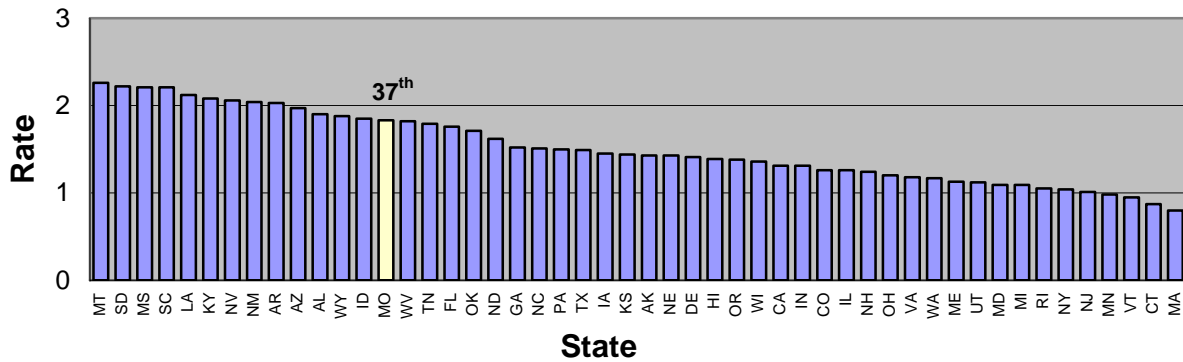
Both the fatality and disabling injury rates in Missouri are at their lowest ever recorded. Based on the national comparison, Missouri has moved from 37<sup>th</sup> in 2005 to 34<sup>th</sup> in 2006. The 2007 national comparison is not yet available. Based on the national goal of a 1.0 fatality rate, Missouri is still moving in the right direction. Focused law enforcement efforts, engineering safety enhancements and increased public awareness all contribute to the decrease.



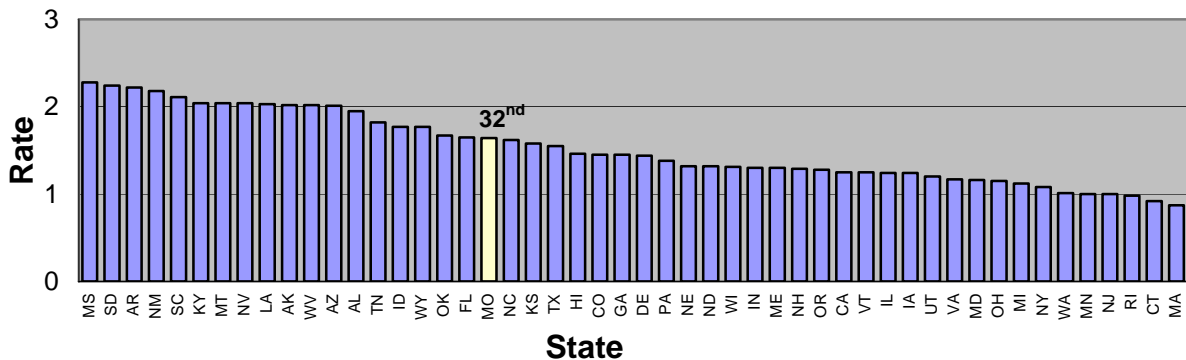
### Missouri's National Ranking in State Fatality Rates 2006



### Missouri's National Ranking in State Fatality Rates 2005



### Missouri's National Ranking in State Fatality Rates 2004



## Safe Transportation System

### *Percent of safety belt/passenger vehicle restraint use*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**

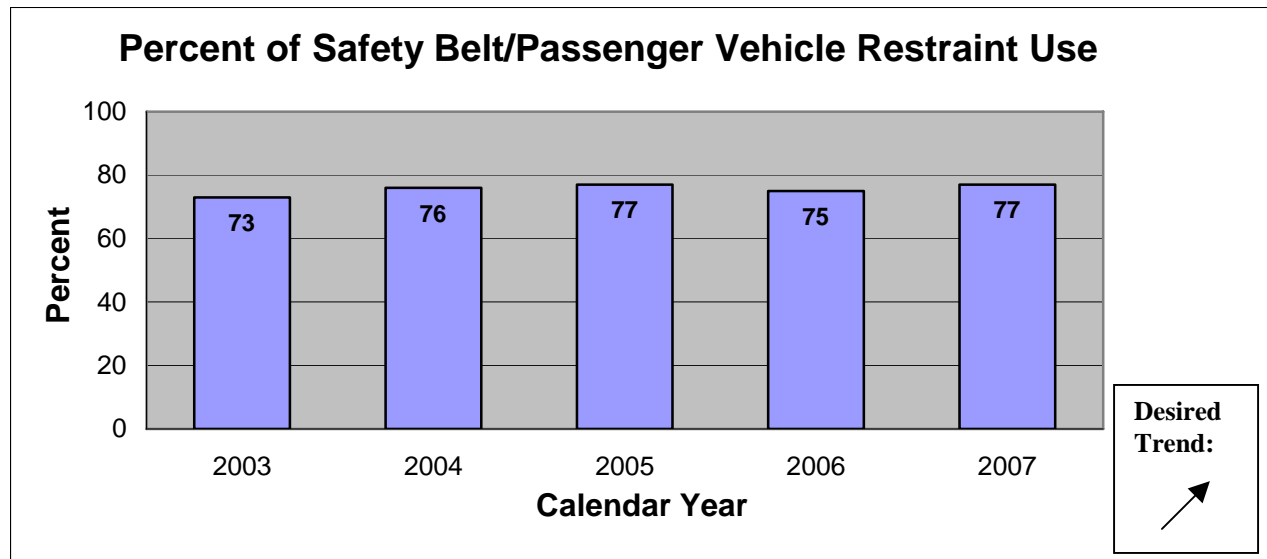
This measure tracks annual trends in safety belt usage by persons in passenger vehicles. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports the Missouri Blueprint for Safer Roadways. This document identifies the statewide initiatives with a goal of reducing fatalities to 1,000 or fewer by 2008.

**Measurement and Data Collection:**

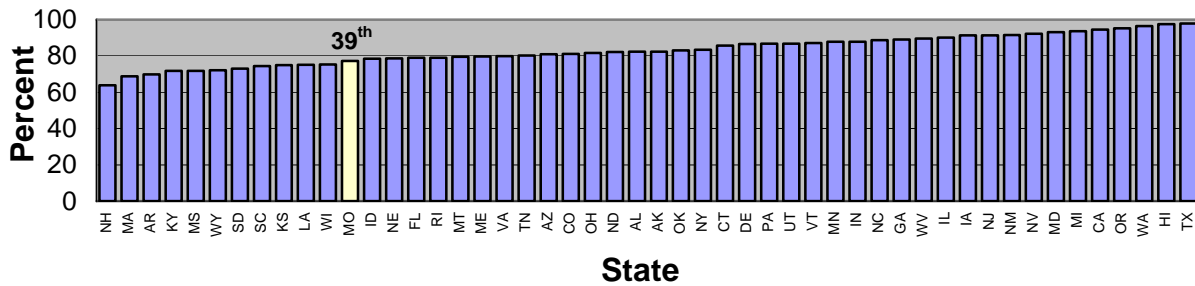
Each June, a statewide survey is conducted at 460 pre-selected locations in 20 counties. The data collected at these sites is calculated into a safety belt usage rate by using a formula approved by the National Highway Traffic Safety Administration. The safety belt usage survey enables data collection from locations representative of 85 percent of the state's population. The data collection plan is the same each year for consistency and compliance with the National Highway Traffic Safety Administration guidelines. Data is collected on an annual basis and is updated in August of the following year. Annual information for the national rankings is not available from all 50 states.

**Improvement Status:**

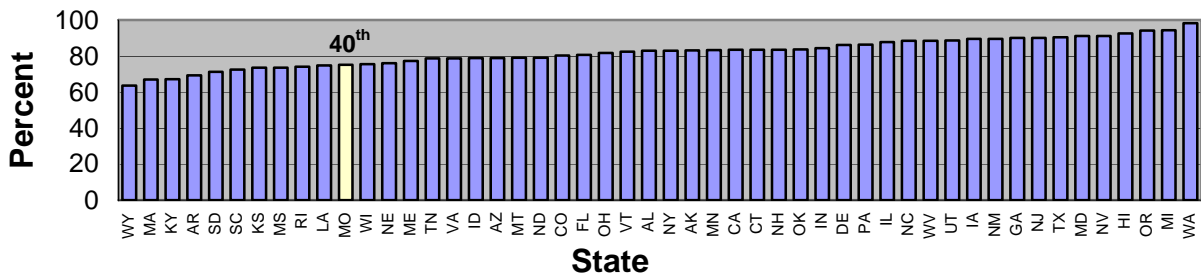
Safety belt use in Missouri has remained fairly constant for the past four years. In the 2007 national comparison, Missouri ranked 39<sup>th</sup> in safety belt usage. Missouri continues to focus efforts through public information and education and law enforcement participation in the national "Click It or Ticket" campaign. The Law Enforcement Traffic Safety Advisory Council (LETSAAC) recently added additional quarterly enforcement dates through December 2008 to focus on safety belt use. A statewide program focusing on teen safety belt use has also proven to be successful in increasing use among teenagers. MoDOT continues to promote the need for a primary safety belt law in Missouri.



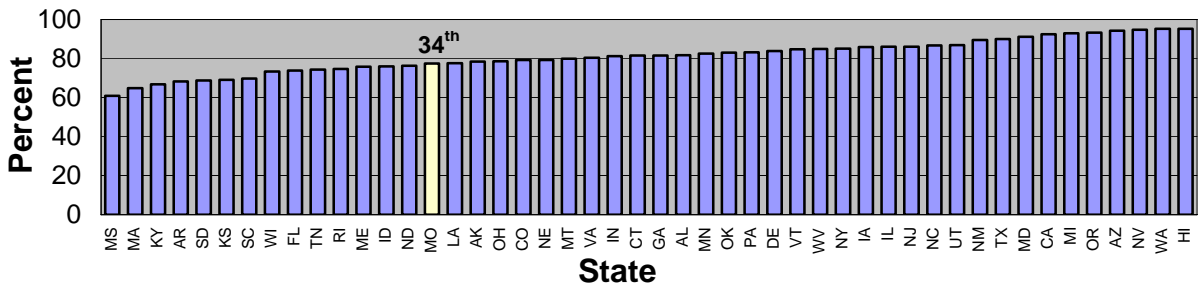
### Missouri's National Ranking in Safety Belt Use 2007



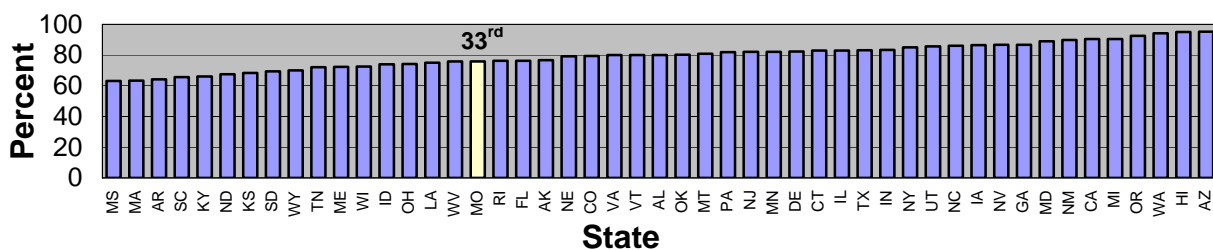
### Missouri's National Ranking in Percent of Safety Belt Use 2006



### Missouri's National Ranking in Percent of Safety Belt Use 2005



### Missouri's National Ranking in Percent of Safety Belt Use 2004



## Safe Transportation System

### *Number of bicycle and pedestrian fatalities and disabling injuries*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**

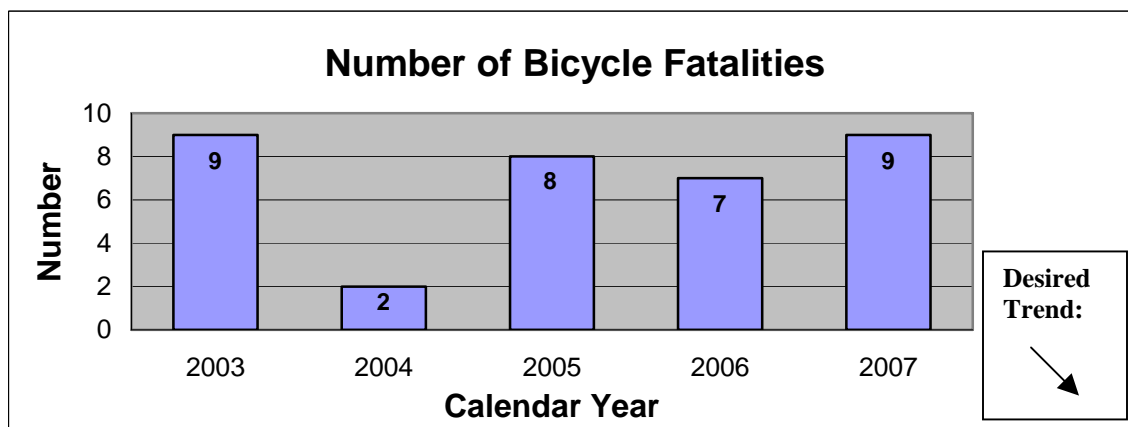
This measure tracks annual trends in fatalities and disabling injuries resulting from traffic crashes with bicycles and pedestrians on Missouri roadways. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports the Missouri Blueprint for Safer Roadways. This document identifies the statewide initiatives with a goal of reducing fatalities to 1,000 or fewer by 2008.

**Measurement and Data Collection:**

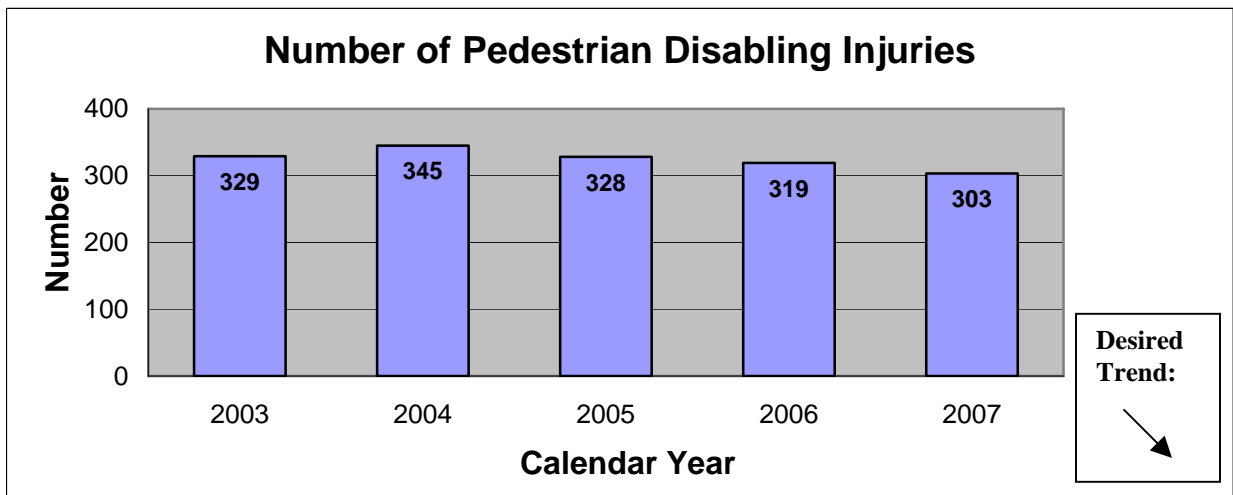
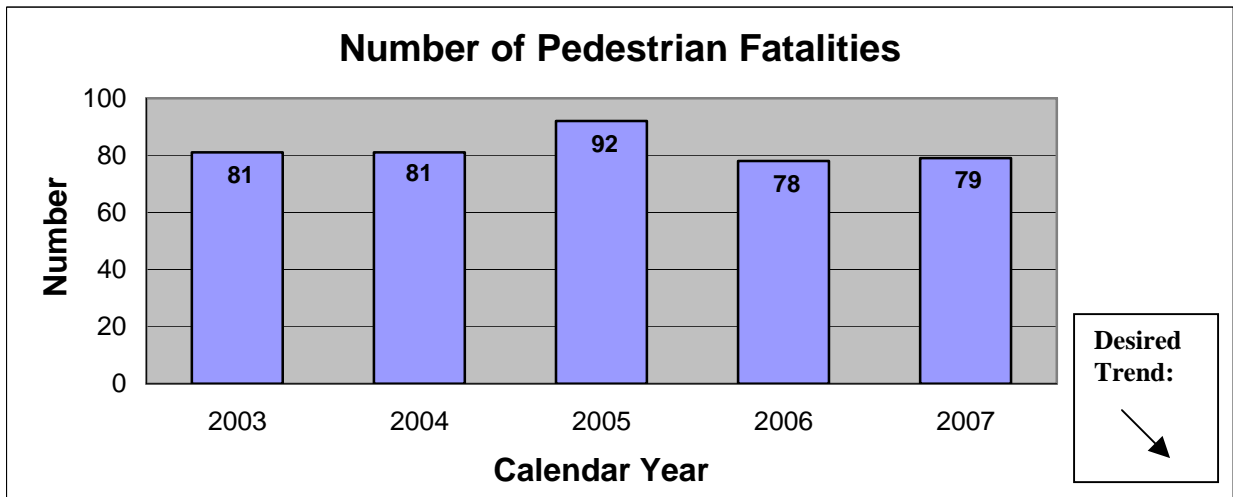
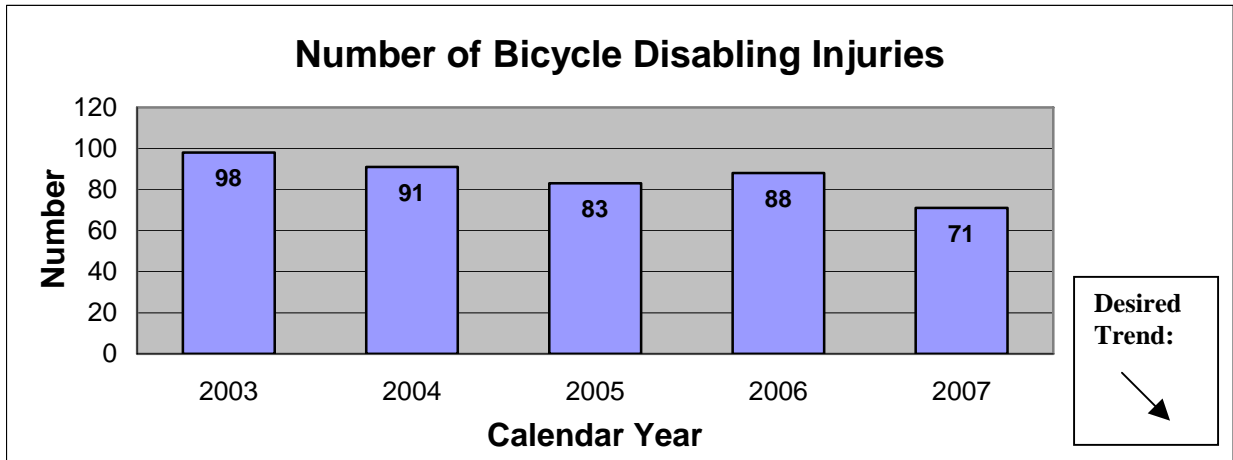
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Data is collected on an annual basis and updated in July of the following year.

**Improvement Status:**

This data reflects the number of fatalities and disabling injuries occurring when a motor vehicle is involved in a crash with a bicycle or pedestrian. These bicycle numbers remain steady, although MoDOT has been increasing the miles of dedicated bike lanes. Pedestrian fatalities and disabling injuries show a slight decrease over the past five years due to signaling and dedicated crossing area improvements. Funds have been dedicated to support the Bicycle Pedestrian Advisory Committee.







## Safe Transportation System

### *Number of motorcycle fatalities and disabling injuries*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**

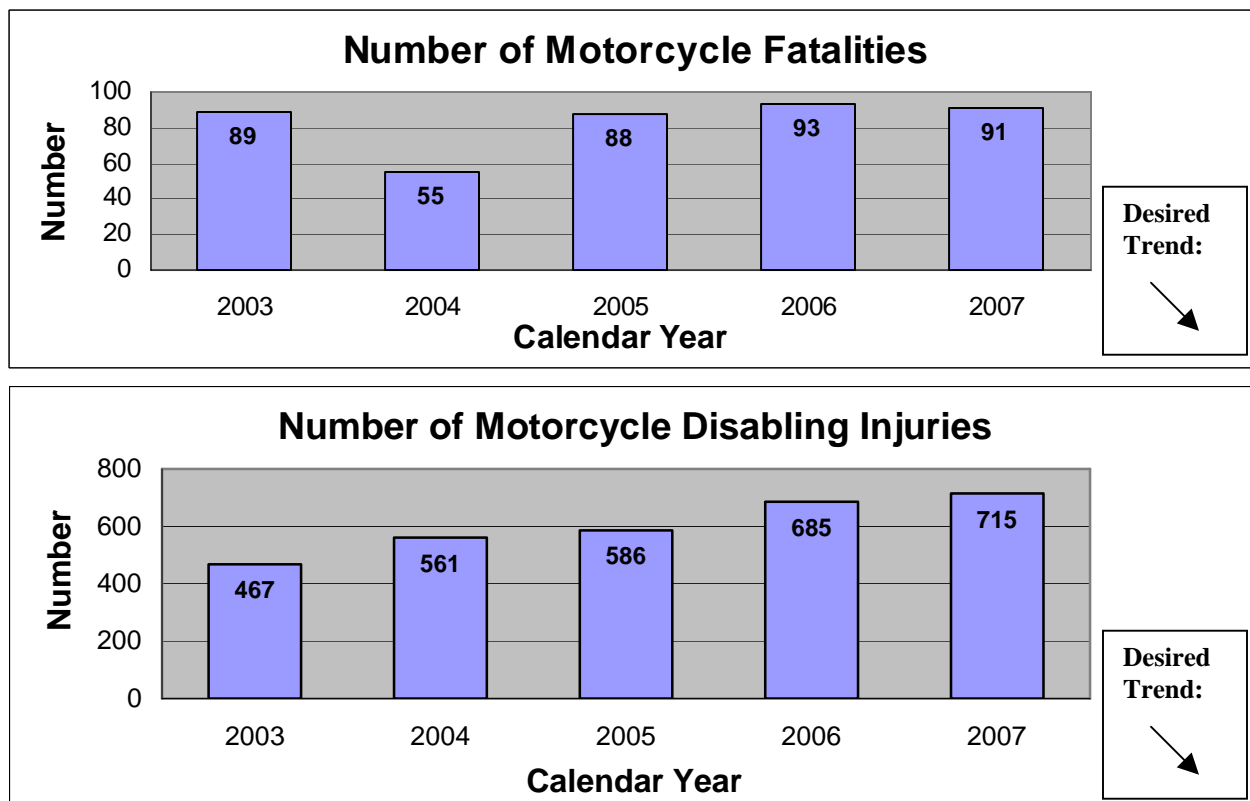
This measure tracks annual trends in fatal and disabling injuries resulting from motorcycle traffic crashes on all Missouri roadways. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports the Missouri Blueprint for Safer Roadways. This document identifies the statewide initiatives with a goal of reducing fatalities to 1,000 or fewer by 2008.

**Measurement and Data Collection:**

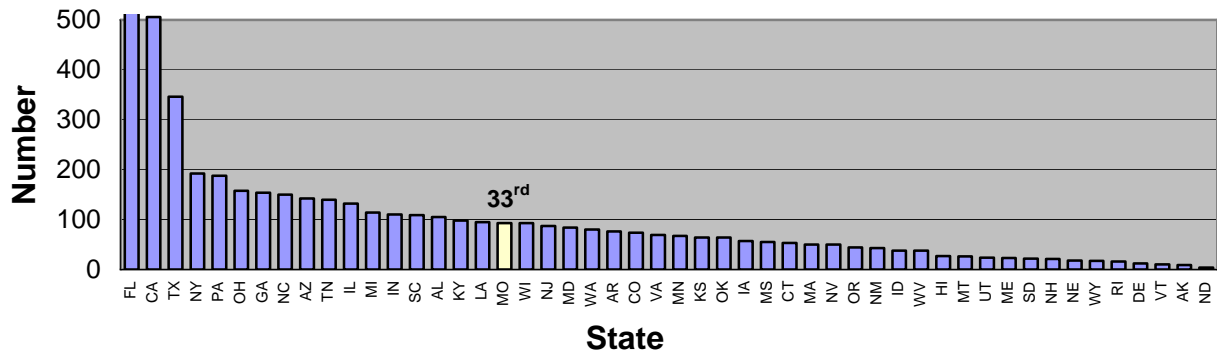
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Data is collected on an annual basis and updated in July of the following year.

**Improvement Status:**

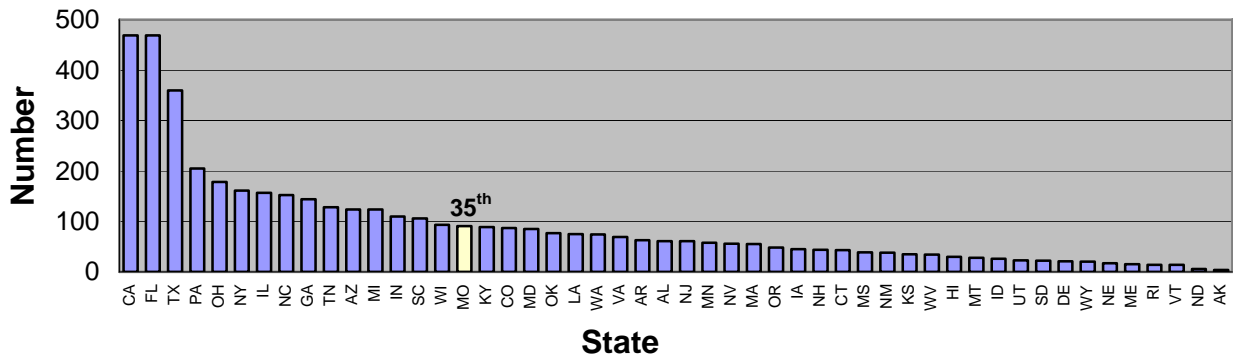
Motorcycle fatalities and disabling injuries have shown an upward trend over the past four years. Missouri continues to experience high numbers of motorcycle fatalities. The national data comparison shows Missouri moved from 35<sup>th</sup> in 2005 to 33<sup>rd</sup> in 2006. The 2007 national comparison is not yet available. Longer riding seasons and a significant increase in the number of licensed motorcycles and riders has increased the exposure rate in recent years. Rider education classes are offered within one hour's driving time throughout Missouri. More than 4,000 riders at 28 sites are trained each year. In 2006, a Motorcycle Safety Task Force was organized and charged with developing a strategic plan. The task force has completed the plan and continues to move forward with implementation.



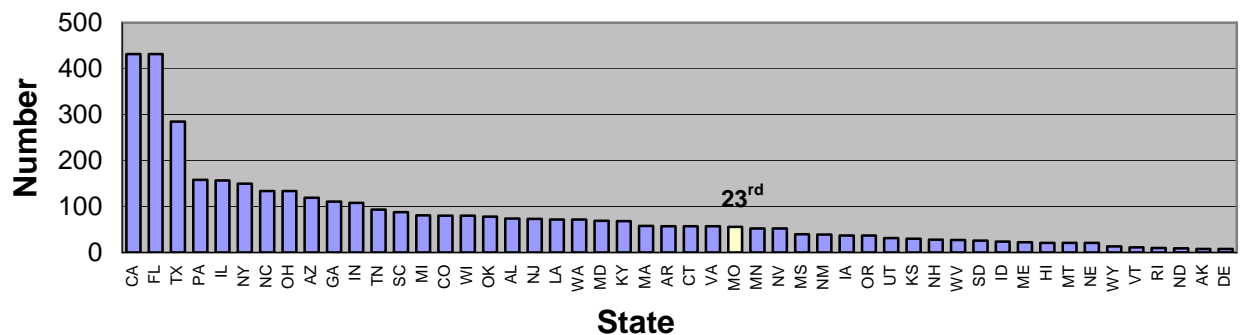
### Missouri's National Ranking in Motorcycle Fatalities 2006



### Missouri's National Ranking in Number of Motorcycle Fatalities 2005



### Missouri's National Ranking in Number of Motorcycle Fatalities 2004



## Safe Transportation System

### *Number of commercial motor vehicle crashes resulting in fatalities*

**Result Driver:** Don Hillis, Director of Systems Management

**Measurement Driver:** Charles Gohring, Motor Carrier Services Program Manager

**Purpose of the Measure:**

This measure tracks the number of commercial motor vehicles involved in fatal crashes each year. MoDOT uses the information to target educational and enforcement efforts.

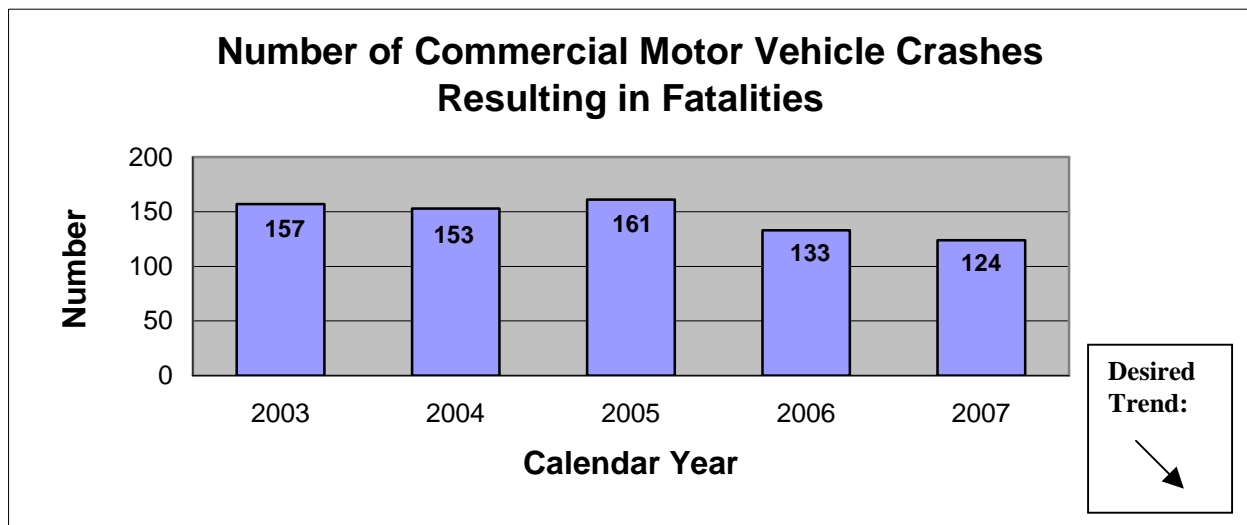
**Measurement and Data Collection:**

The Missouri State Highway Patrol collects and records the crash statistics used in this measure. The data used in this measure reports the number of commercial motor vehicles involved in a crash where one or more people die within 30 days as a result of the crash. This is an annual measure and will be updated each April for the previous year.

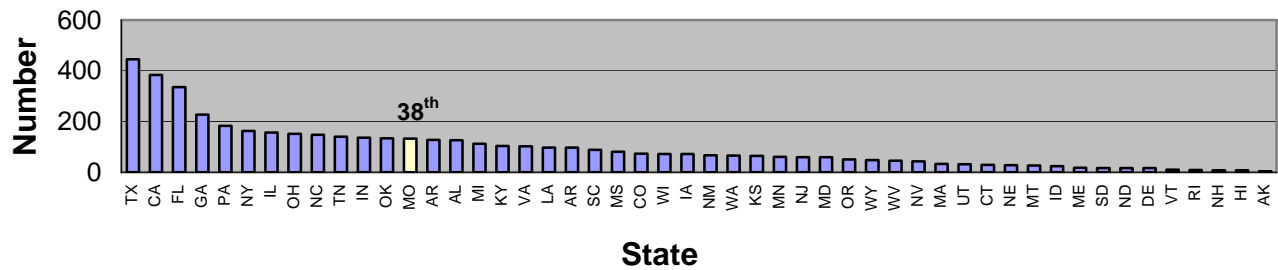
**Improvement Status:**

Between 2003 and 2007, the number of Missouri commercial motor vehicle fatal crashes dropped from 157 to 124, a 21 percent decrease. MoDOT coordinates its efforts to reduce fatal CMV crashes with the Missouri State Highway Patrol, the Federal Motor Carrier Safety Administration Missouri Division and the Kansas City and St. Louis police departments. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, roadside rumble strips, and intelligent transportation systems at scales. MoDOT conducts carrier safety training, regulation compliance reviews, safety audits of new motor carrier firms and truck inspections at terminals and destinations. The Missouri State Highway Patrol, St. Louis and Kansas City Police Departments conduct commercial vehicle roadside inspections in order to remove unsafe drivers and vehicles from the road.

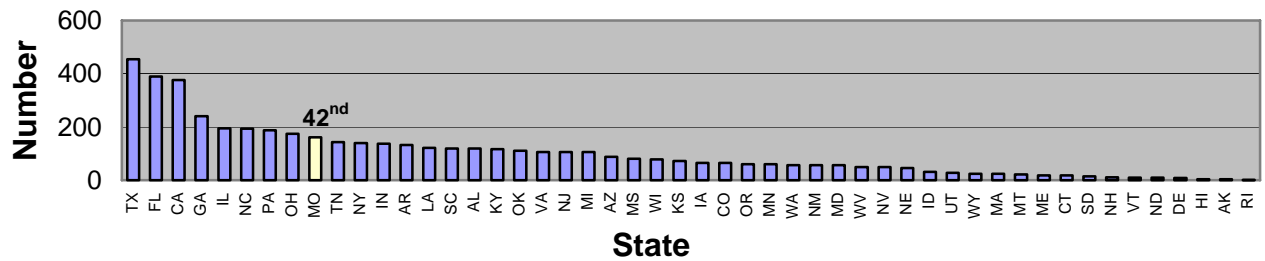
Missouri ranked 38<sup>th</sup> in the number of fatality crashes nationwide in 2006. Rankings of 2007 are not yet available.



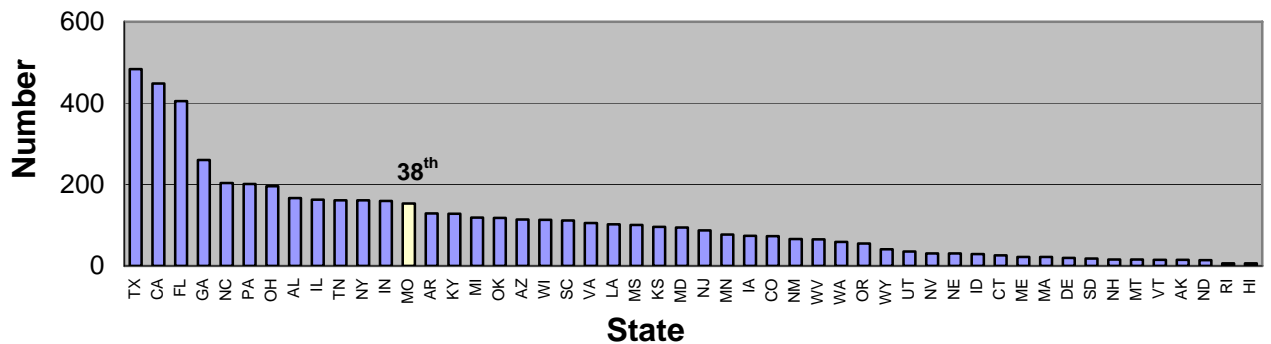
### Missouri's National Ranking in Number of Fatal Commercial Vehicle Crashes 2006



### Missouri's National Ranking in Number of Fatal Commercial Vehicle Crashes 2005



### Missouri's National Ranking in Number of Fatal Commercial Vehicle Crashes 2004



## Safe Transportation System

### *Number of commercial motor vehicle crashes resulting in injuries*

**Result Driver:** Don Hillis, Director of Systems Management

**Measurement Driver:** Charles Gohring, Motor Carrier Services Program Manager

**Purpose of the Measure:**

This measure tracks number of commercial motor vehicles involved in injury crashes each year. MoDOT uses the information to target educational and enforcement efforts.

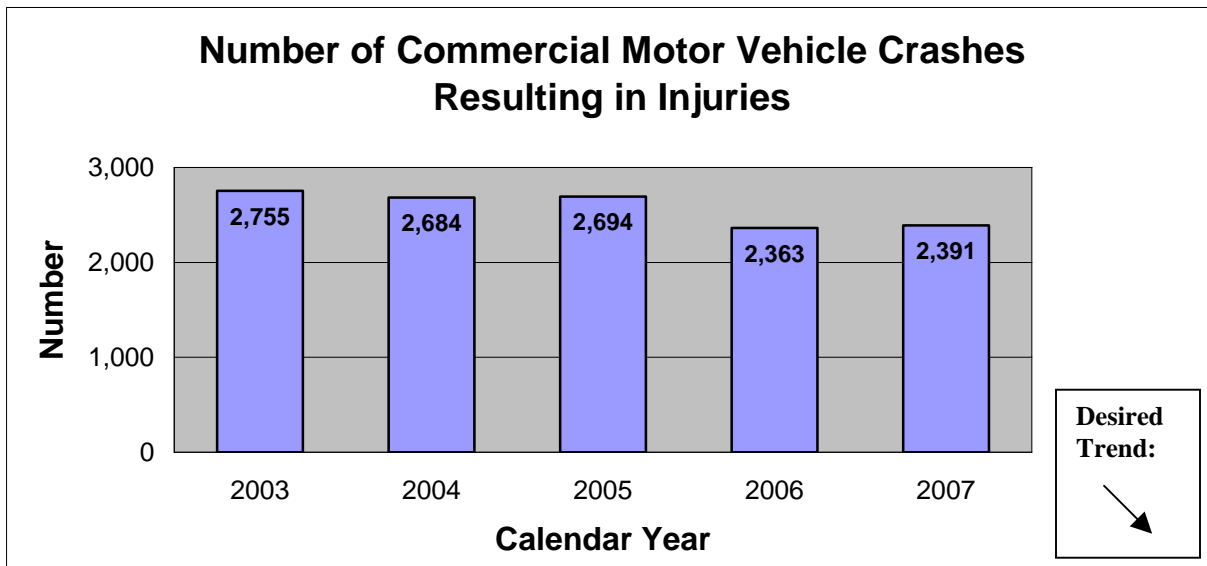
**Measurement and Data Collection:**

The Missouri State Highway Patrol collects and records crash statistics. The data for this measure reflects the number of commercial motor vehicles involved in crashes where one or more people are injured. This is an annual measure and will be updated each April for the previous year.

**Improvement Status:**

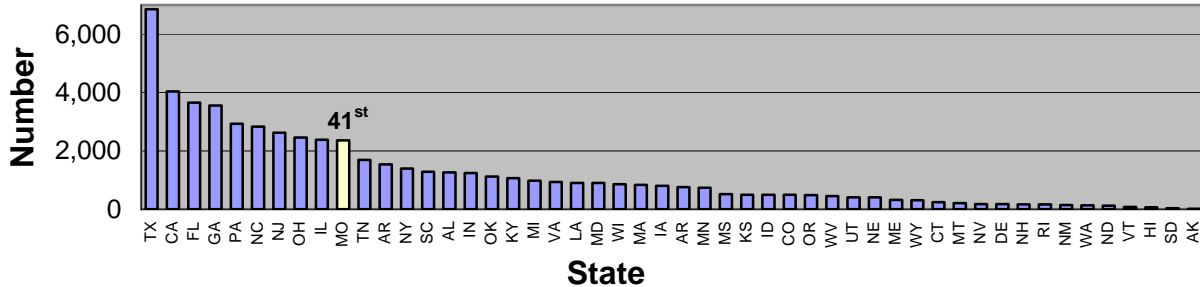
Between 2003 and 2007, the number of commercial motor vehicle crashes resulting in injuries decreased. The number of injury crashes notably decreased by 12 percent between 2005 and 2006. In 2007, the crash rate increased by 1 percent over the 2006 tally. The overall downward trend is due to the coordinated safety efforts of MoDOT, the Missouri State Highway Patrol, the Federal Motor Carrier Safety Administration Missouri Division, and the Kansas City and St. Louis police departments. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, rumble stripes, and intelligent transportation systems at scales. MoDOT conducts carrier safety training, regulation compliance reviews, safety audits of new motor carrier firms and truck inspections at terminals and destinations. The Missouri State Highway Patrol, St. Louis and Kansas City police departments conduct commercial vehicle roadside inspections in order to remove unsafe drivers and vehicles from the road.

Missouri ranked 41<sup>st</sup> in the number of injury crashes nationwide in 2006. Rankings for 2007 are not yet available.



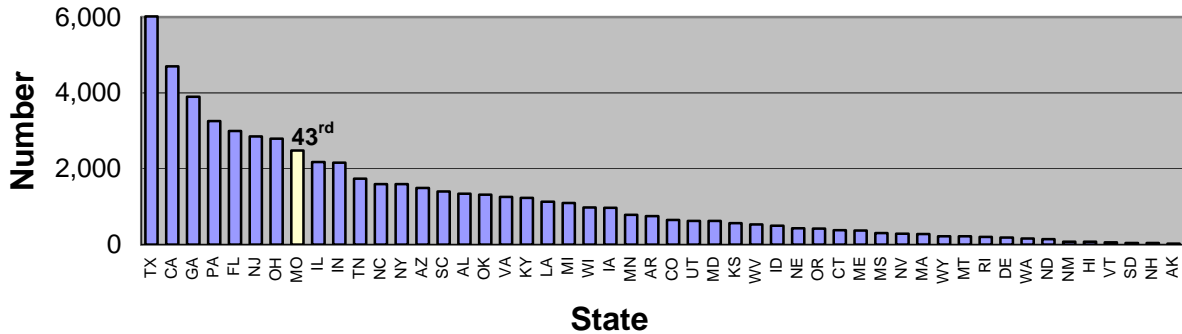
### Missouri's National Ranking in Number of Injury Commercial Vehicle Crashes

2006



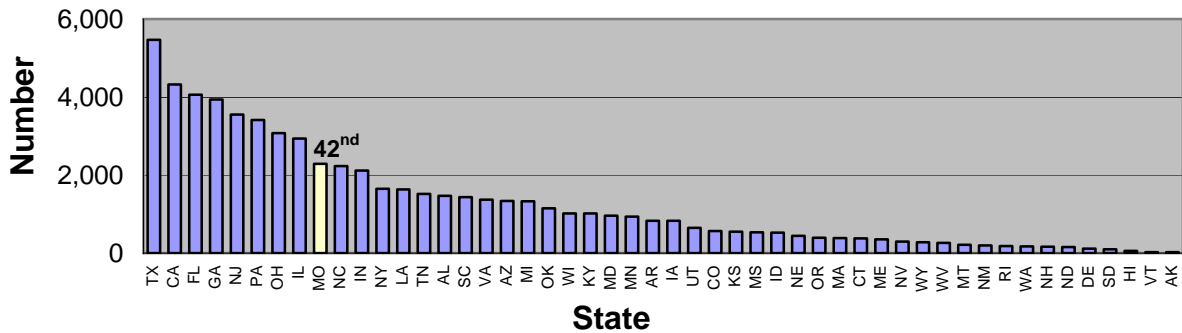
### Missouri's National Ranking in Number of Injury Commercial Vehicle Crashes

2005



### Missouri's National Ranking in Number of Injury Commercial Vehicle Crashes

2004



## Safe Transportation System

### *Number of fatalities and injuries in work zones*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Dan Smith, Traffic Management & Operations Engineer

**Purpose of the Measure:**

An important factor in evaluating the safety of Missouri's transportation system is determining the safety of work zones on the state's roads. This measure tracks the number of traffic-related fatalities, injuries, and overall crashes occurring in work zones on any Missouri public road.

**Measurement and Data Collection:**

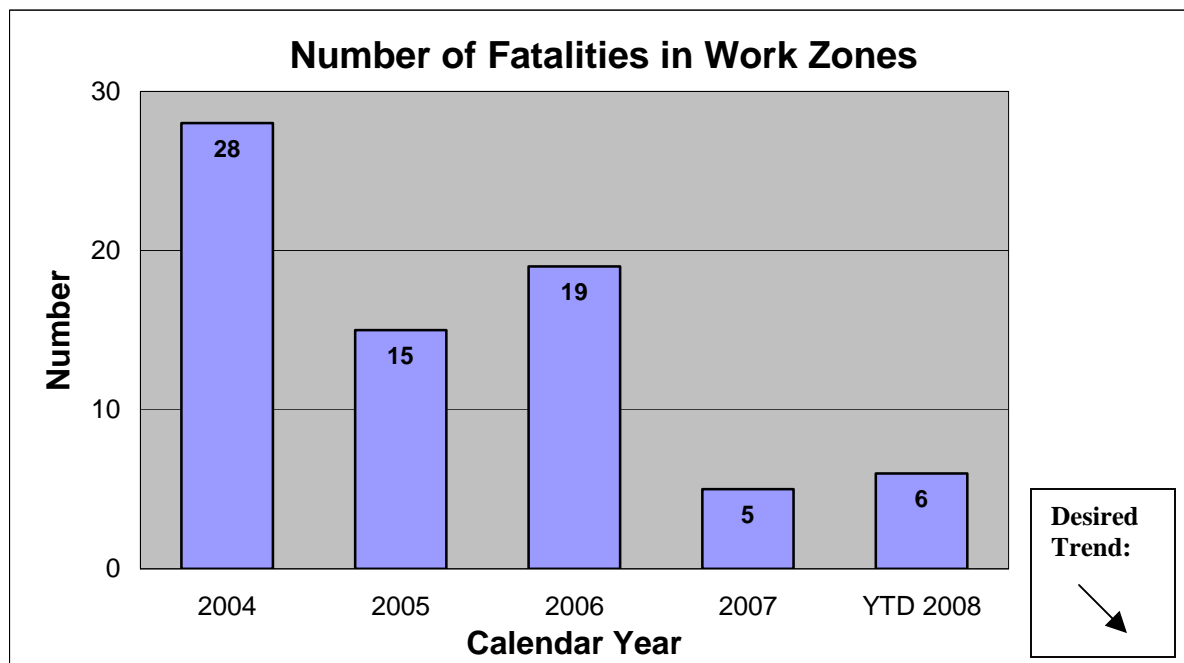
Missouri law enforcement agencies are required to report crashes by submitting a standardized vehicle accident report form to the Missouri State Highway Patrol. MSHP personnel enter these reports into a statewide traffic crash database. MoDOT staff query and analyze this data to identify work zone-related crash statistics quarterly and report the results via this measurement.

**Improvement Status:**

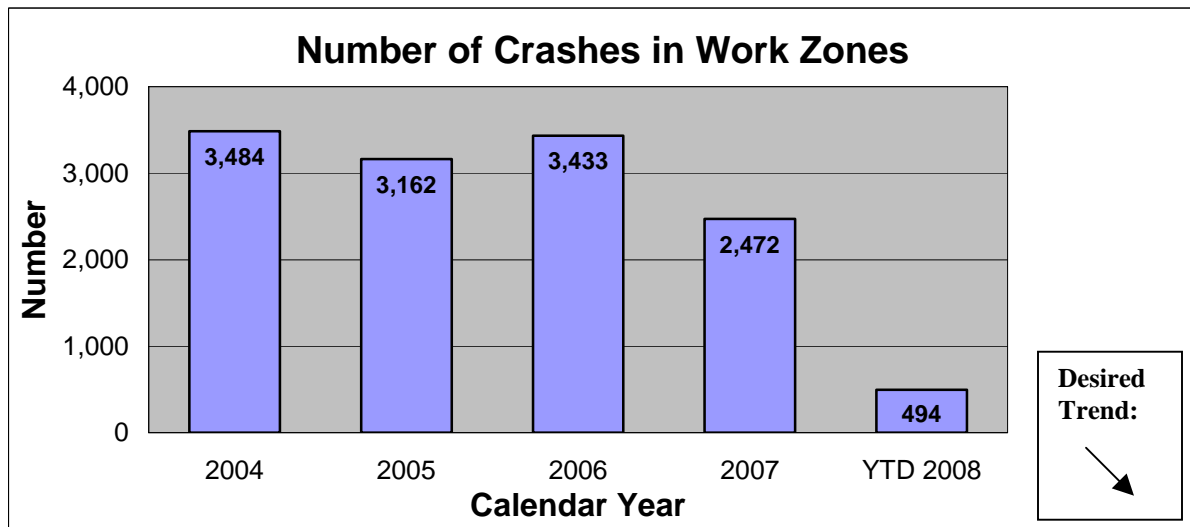
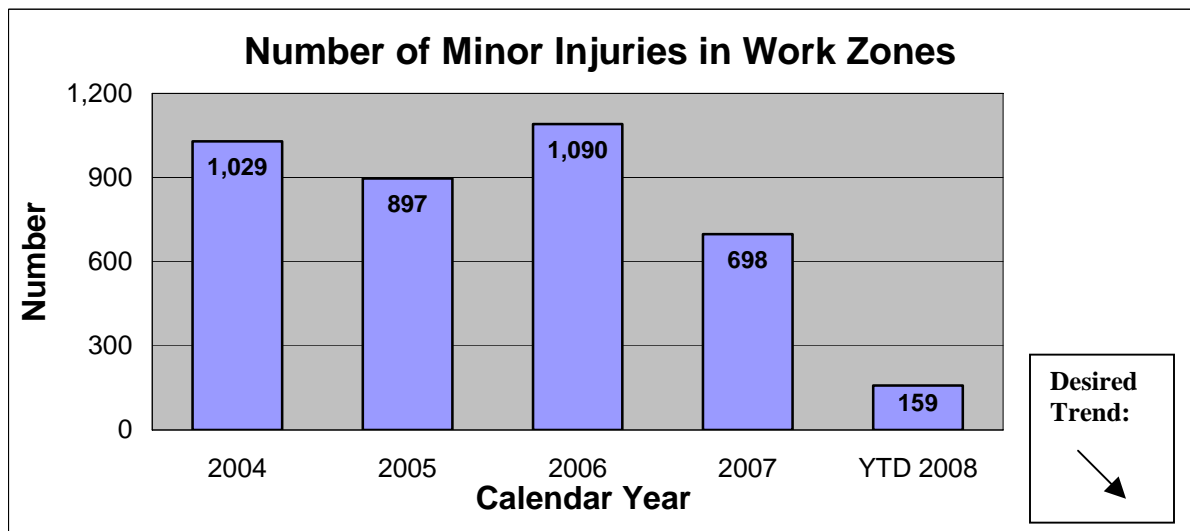
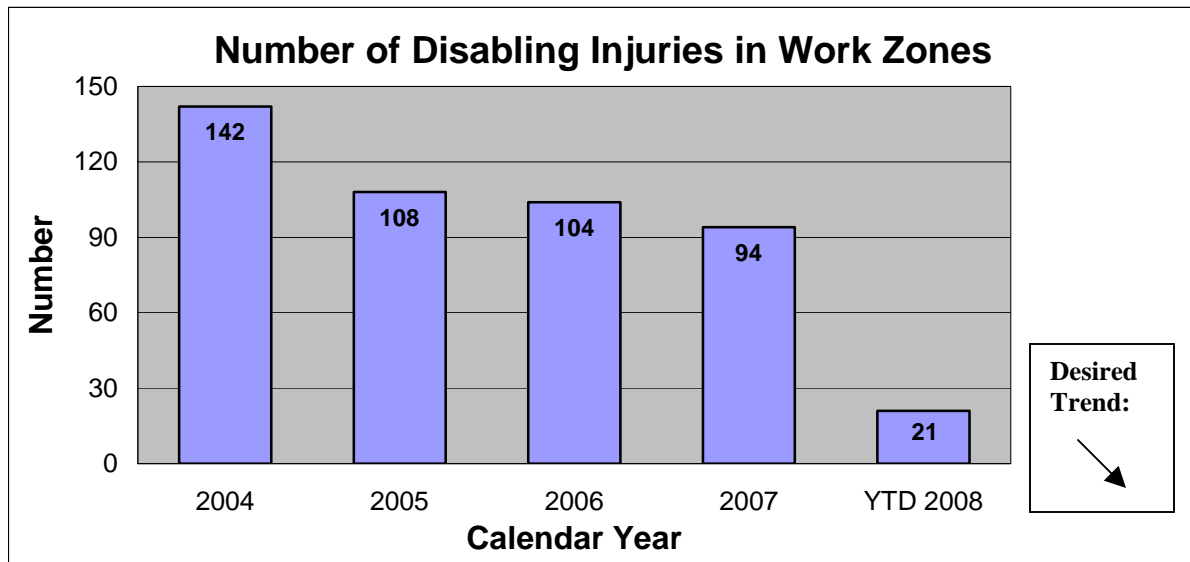
Fatalities have increased in early 2008, partially due to a triple-fatality crash in South Central Missouri. Steps have been taken to analyze severe work zone crashes and prevent future crashes in work zones.

Final crash statistics for calendar year 2007 indicate a 74 percent reduction in the number of fatalities, a 10 percent reduction in the number of disabling injuries, a 36 percent reduction in the number of minor injuries and a 28 percent reduction in the number of crashes occurring in Missouri's work zones when compared to the final numbers for calendar year 2006.

Missouri generally has experienced a downward trend in work zone-related fatalities, injuries, and crashes since 2002, with a significant reduction in three of the four major severity categories in 2007. Such improvement in work zone safety is attributable partially to the department's proactive approach to raising work zone safety awareness and minimizing impacts on the traveling public.







## Safe Transportation System

### *Number of highway-rail crossing fatalities and collisions*

**Results Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Rod Massman, Administrator of Railroads

**Purpose of the Measure:**

This measure tracks annual trends in fatalities and collisions resulting from train-vehicle crashes at public railroad crossings in Missouri. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports the Missouri Blueprint for Safer Roadways. This document identifies the statewide initiatives with a goal of reducing fatalities in all areas of highway safety, including highway-rail crossing safety.

**Measurement and Data Collection:**

MoDOT collects crash data and enters it in a railroad safety information system used to update MoDOT's traffic management system. This does not include fatalities or collisions from those on railroad property at areas other than at public railroad crossings, which are tabulated separately. Missouri is then ranked with all other states using data from the Federal Railroad Administration that consists of the numbers of collisions and fatalities in each state. Data is updated quarterly.

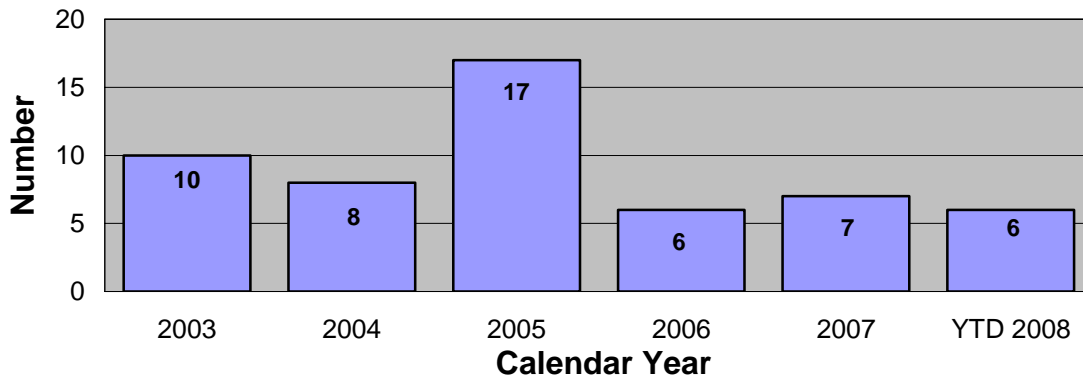
**Improvement Status:**

MoDOT continues to coordinate its railroad crossing projects in the areas of greatest need using a safety exposure index in addition to focusing on crossings with a history of accidents or limited sight distance. By agreeing with the railroads to look at a defined area, called a corridor, and sharing financial responsibilities for improvements, limited funds can be spread over a wider area. This increases the number of overall projects completed in specific areas of the state.

Other improvements include an increased emphasis on and MoDOT employee participation in public outreach opportunities on rail safety in conjunction with Operation Lifesaver, Inc. Another improvement is the exploration of partnerships with other government agencies, cities and school districts to upgrade flasher-only crossings to crossings with both lights and gates, to install gates and lights at crossings, and to replace outdated lighting with LED systems. There is also a renewed emphasis on closing unsafe, redundant or unnecessary crossings.

In 2007 there were seven fatalities. In 2008, there have already been six fatalities. In order to combat this, MoDOT has increased and implemented more public outreach efforts along with engineering improvements. This has included distributing an emergency responder manual for train accidents, renewing efforts to present rail crossing information at driver's education classes, and certifying additional MoDOT employees in giving Operation Lifesaver presentations. MoDOT also hosted Rail Safety Week April 13 - 18, 2008. During 2008, MoDOT will continue to co-sponsor "positive enforcement" efforts with the Missouri State Highway Patrol and Missouri Operation Lifesaver at crossings throughout the state. The continuing focus is the three E's: engineering, education and enforcement. This effort is designed to increase public awareness and discussion of the need for increased safety and heightened awareness at railroad crossings.

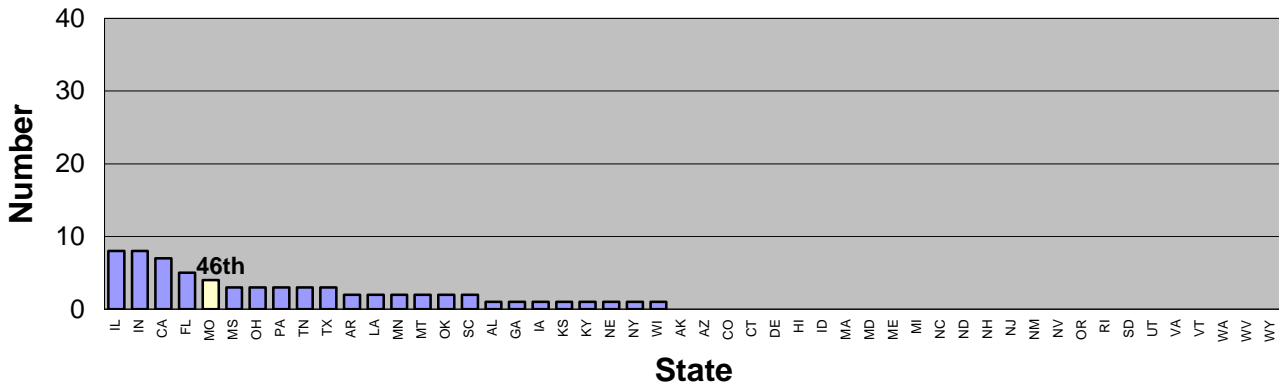
### Number of Highway-Rail Crossing Fatalities



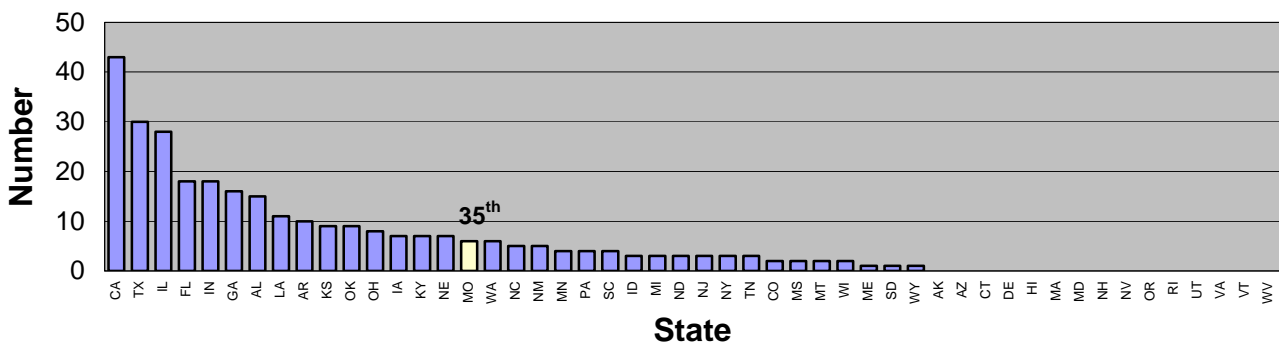
Desired  
Trend:



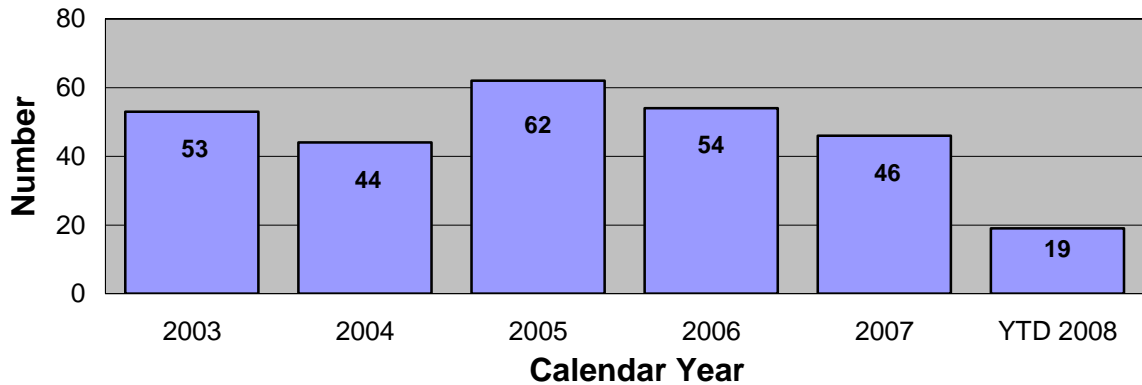
### Missouri's National Ranking in Number of Highway-Rail Crossing Fatalities January-April 2008



### Missouri's National Ranking in Number of Highway-Rail Crossing Fatalities January-December 2007



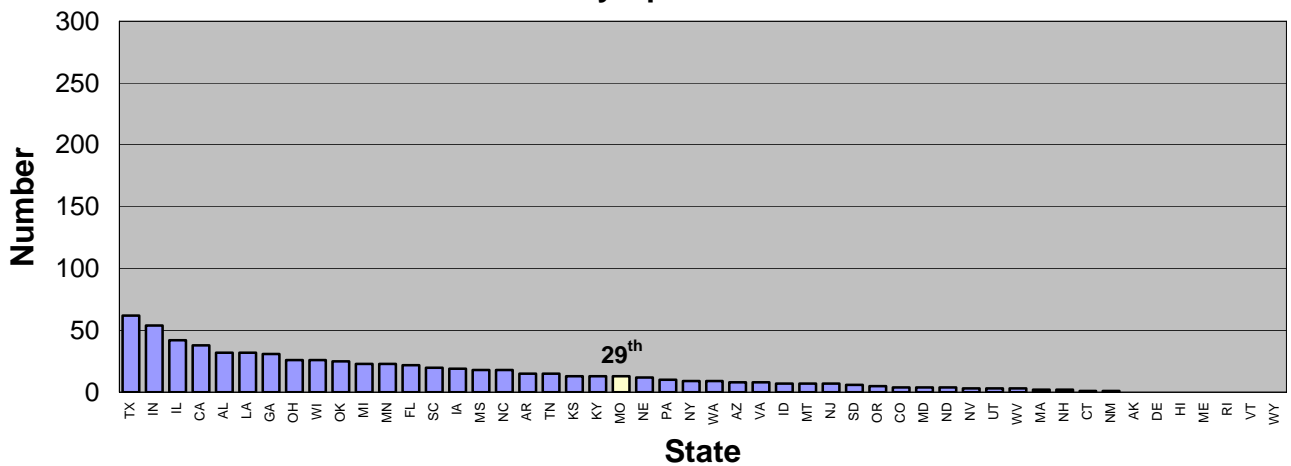
## Number of Highway-Rail Crossing Collisions



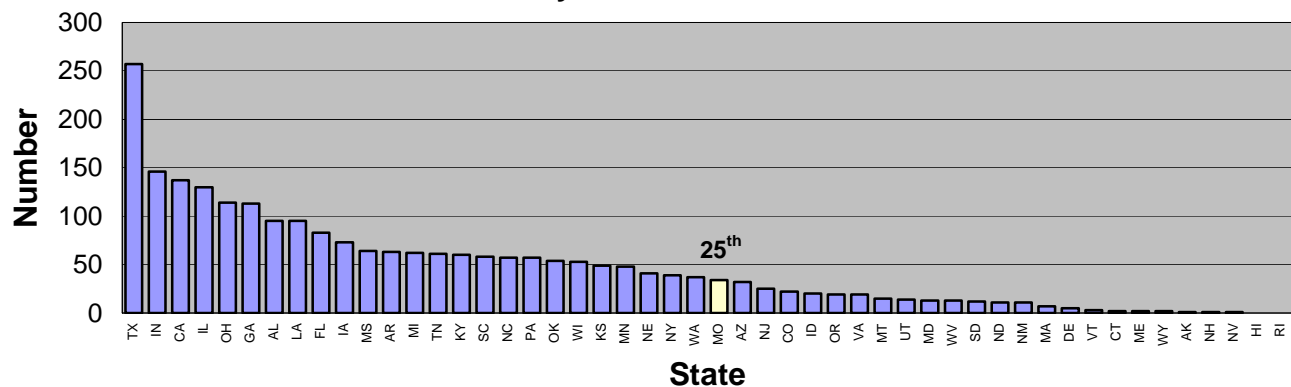
Desired  
Trend:



## Missouri's National Ranking in Number of Highway-Rail Crossing Collisions January-April 2008



## Missouri's National Ranking in Number of Highway-Rail Crossing Collisions January-December 2007

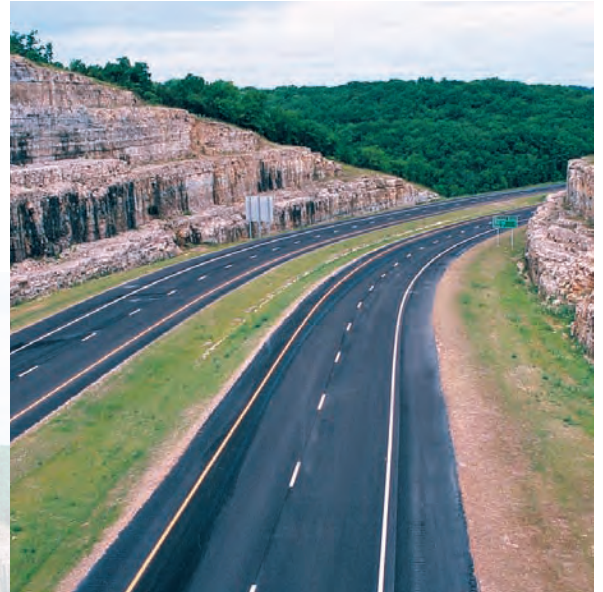
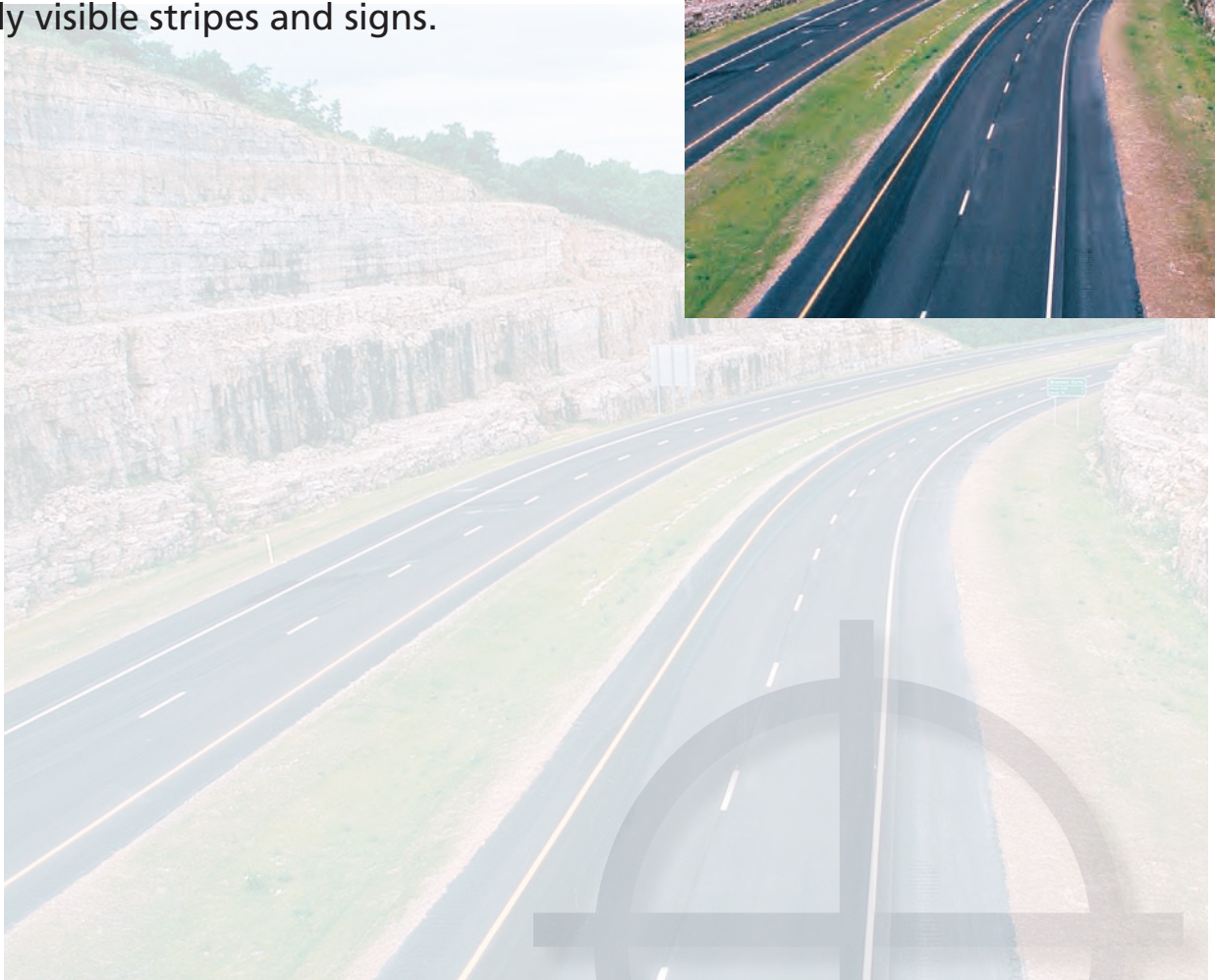


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# Roadway Visibility

*Tangible Result Driver – Don Hillis,  
Director of System Management*

Good roadway visibility in all weather and light conditions is critical to safe and efficient travel. MoDOT will delight its customers by using top-quality and highly visible stripes and signs.



## Roadway Visibility

### *Rate of nighttime crashes*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Mike Curtit, Assistant State Traffic Engineer

**Purpose of the Measure:**

This measure tracks the types of crashes where visibility of stripes and signs may be a contributing crash factor.

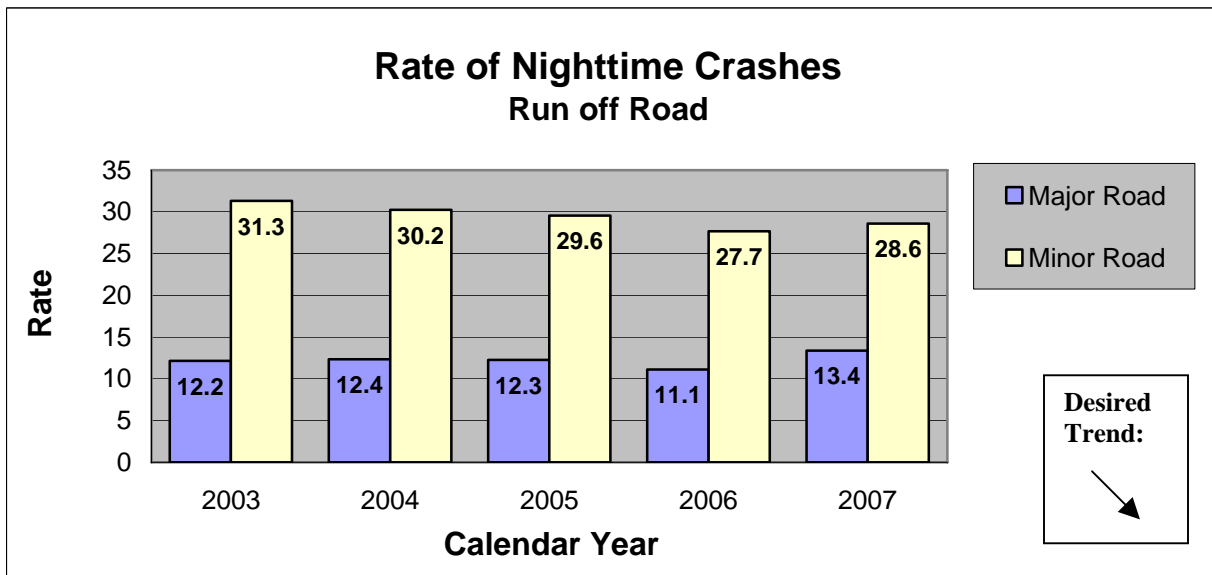
**Measurement and Data Collection:**

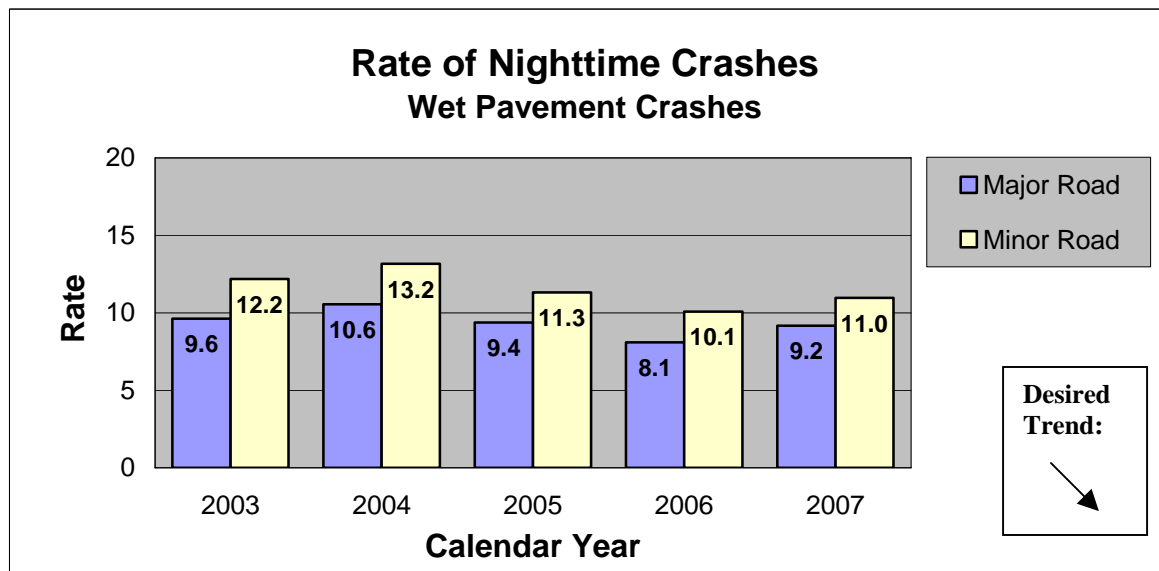
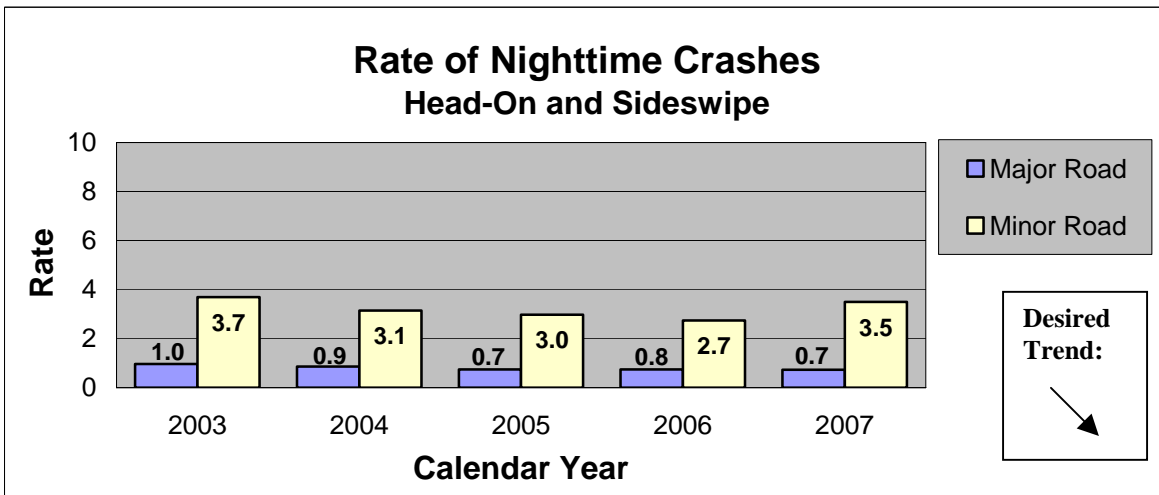
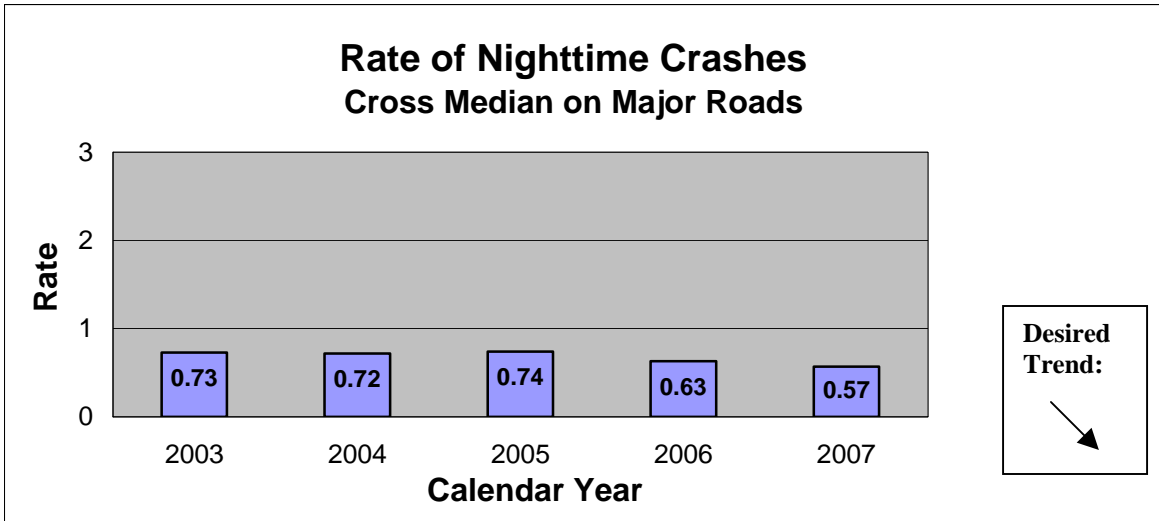
Data is collected from the statewide crash database to identify and measure the rate of nighttime crashes. Further filtering of the data divides these night crashes by major and minor roadways. Major roadways are generally used for statewide or interstate travel and minor roadways are generally used for local traffic needs. Crash rates are calculated using the average annual daily traffic counts and are expressed in the unit, per 100 million vehicle miles (HMVM), which is the national standard for expressing crash rates. This is an annual measure with the data updated each April.

**Improvement Status:**

The crash rate for run-off-road crashes increased 21 percent on major roads and 3 percent on minor roads. The crash rate for cross-median crashes on major roads decreased 10 percent. The crash rate for head-on and sideswipe crashes has been stable for major roads over the past three years, but increased 30 percent this last year on minor roads. The crash rate for wet pavement crashes increased 10 percent for major roads and 9 percent for minor roads. Crashes during winter weather events increased significantly in 2007. Most of the increase was non-injury crashes.

The guidelines for the Better Roads, Brighter Future program include upgrading the signing, continuing to implement the new pavement marking system, adding edgeline rumble stripes, and including centerline rumble stripes on two lane roadways. The pavement tape that will be used as a part of Better Roads, Brighter Future program will be a “wet reflective” tape that has improved visibility during wet pavement conditions.





## Roadway Visibility

### *Percent of signs that meet customers' expectations*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Mike Curtit, Assistant State Traffic Engineer

**Purpose of the Measure:**

This measure will track whether the department's sign policy and the design standards, and sign replacement policy are resulting in visible signs that meet customers' expectations.

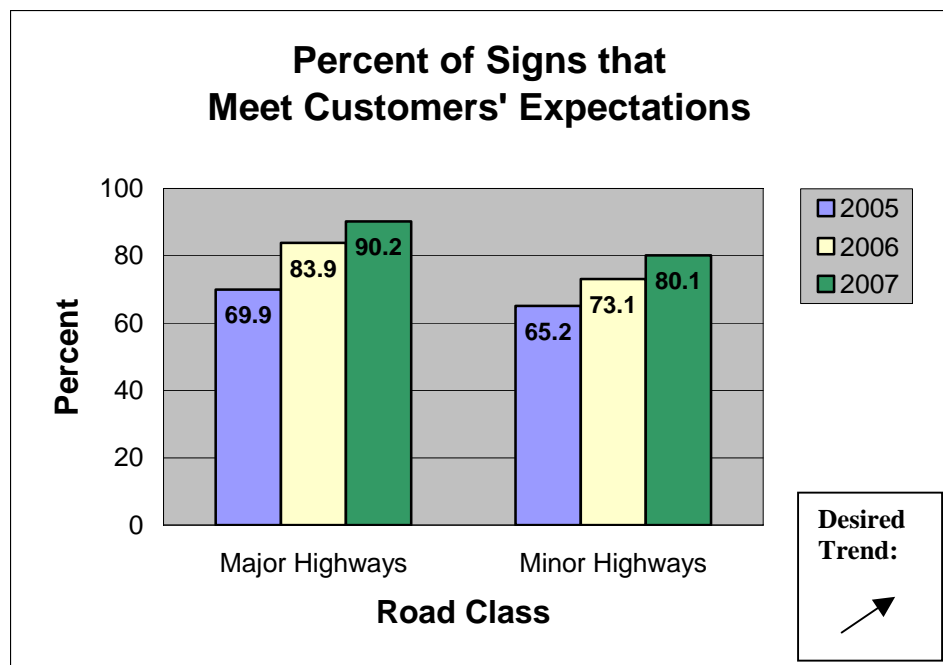
**Measurement and Data Collection:**

Sign-quality attributes that define user expectations have been developed based on an industry-wide literature review. The attributes selected for this measure are those that can be captured during a night sign log. A night sign log is conducted on randomly generated road segments. MoDOT employees drive a road at night, recording the location and condition of the signs, particularly how visible the signs are with headlights. MoDOT employees collect the data annually in the fall, and update it each October.

**Improvement Status:**

Over 90 percent of signs on major highways are in good condition. This represents a 6 percent increase from last year. Currently 80 percent of our signs on minor roads are in good condition. This represents a 7 percent increase from last year.

The Smooth Roads Initiative, which was completed in 2006, improved signing on the major routes. The Better Roads, Brighter Future program, which will be completed by the end of 2011, also emphasizes signing improvements on major routes. MoDOT performs annual inspections of every sign in Missouri and does random quality assurance reviews targeted at signing.





## Roadway Visibility

### *Percent of stripes that meet customers' expectations*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Jim Brocksmith, Technical Support Engineer

**Purpose of the Measure:**

This measure tracks whether MoDOT's striping policy, processes and materials used are resulting in visible stripes that meet customers' expectations.

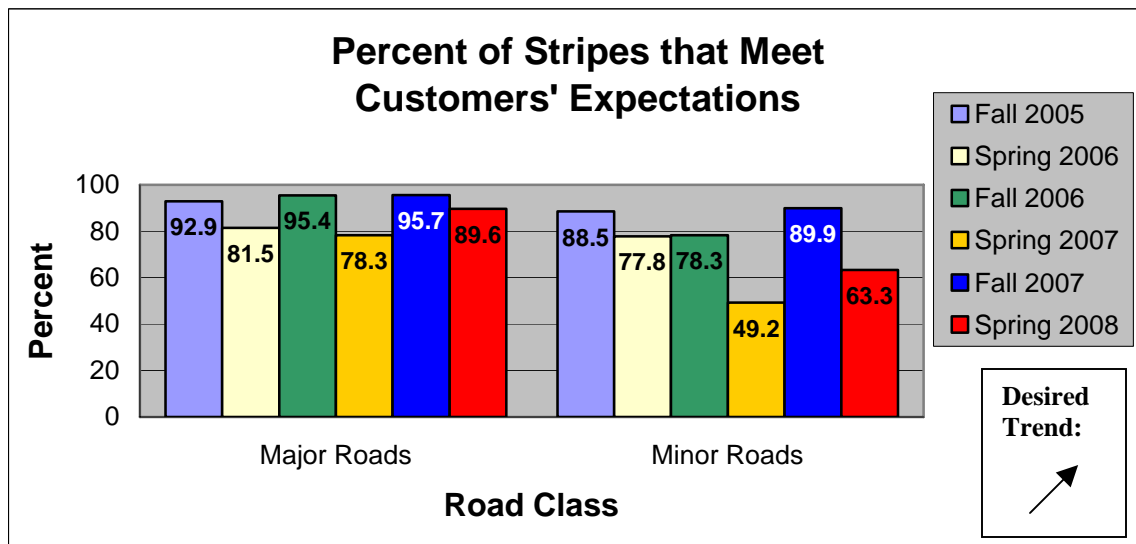
**Measurement and Data Collection:**

Striping quality attributes that define user expectations have been developed based on an industry-wide literature review. The attribute selected for this measure is the retroreflectivity of the striping or the visibility of the striping at night. Retroreflectivity is measured as the amount of light from vehicle headlights that is returned to the driver. We have established retroreflectivity benchmarks of 150 for white and 125 for yellow. These benchmarks were chosen because they are at the high end of what research and other states consider minimum acceptable levels. Data is collected by taking retroreflectivity readings on randomly selected road segments in the fall and spring of each year. This data is then compared to the benchmarks. Traffic volumes, winter weather and pavement condition all have an impact on the performance and durability of striping. The measurement unit for retroreflectivity is millicandellas per meter squared per lux (mcd/m<sup>2</sup>/lux). Fall readings are taken in October and November as the striping season is ending. Spring readings are taken in May to reflect the condition of the markings coming out of the winter when they are typically the poorest.

**Improvement Status:**

The data was analyzed in respect to the above benchmarks MoDOT set as the minimum acceptable level of retroreflectivity. The winter of 2007-2008 had a significant impact on the readings for spring 2008. However, spring 2008 majors roads are 14 percent higher, and the minor roads 28 percent higher than the readings in the spring 2007, which was a similarly hard winter. The roadway visibility plan for major roads is definitely showing improvements.

MoDOT has changed the materials being used starting this season, moving away from the durable materials to a greater use of paint. There are savings of approximately \$4 million dollars with the new system, however, the winter performance of the new system is expected to be less. MoDOT has begun testing the use of wet night products, which will increase the visibility of the markings on rainy nights and also contrast markings on concrete.



## Roadway Visibility

### *Percent of work zones meeting expectations for visibility*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Dan Smith, Traffic Management & Operations Engineer

**Purpose of the Measure:**

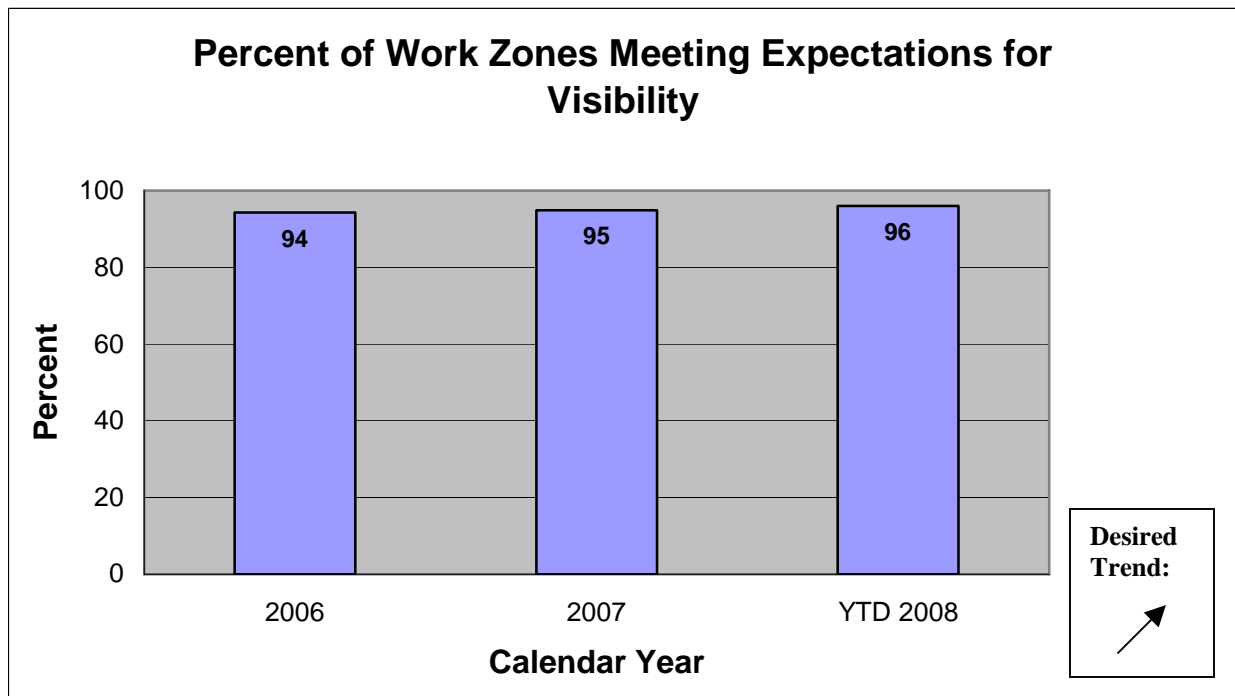
An important factor in evaluating the department's performance in temporary traffic control design, deployment, operation, and maintenance is the measurement of the effectiveness of the visual guidance provided to motorists in our work zones. This measure tracks how well the department meets customers' expectations of visibility in work zones on state highways.

**Measurement and Data Collection:**

Using a formal inspection worksheet, Central Office and district employees evaluate visibility of construction, MoDOT and permit work zones across the state. Each evaluation consists of a subjective assessment of engineered and operational factors affecting visibility. The evaluator assigns a pass, fail or n/a rating to each of these individual factors and a pass or fail rating for their overall perception of the work zone visibility. The overall perception ratings are compiled quarterly and reported via this measurement.

**Improvement Status:**

Compilation of the 1,636 evaluations performed by MoDOT staff between January and June of this calendar year resulted in a 96 percent satisfaction rating for work zone visibility (a negative perception of visibility was recorded in 4 percent of the evaluations). This rating is one percent higher than last calendar year's ratings. Such progress is attributable to the greater emphasis MoDOT has placed on providing quality temporary traffic control installations that effectively direct, guide and inform users through and around construction and maintenance work zones on the state highway system.



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# Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

*Tangible Result Driver – Shane Peck,  
Community Relations Director*

Responding to customers in a courteous, personal and understandable way is important. MoDOT listens and seeks to understand, because it values everyone's opinion. MoDOT's goal is to delight them with its customer service.



## Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

### *Percent of overall customer satisfaction*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Coordinator

**Purpose of the Measure:**

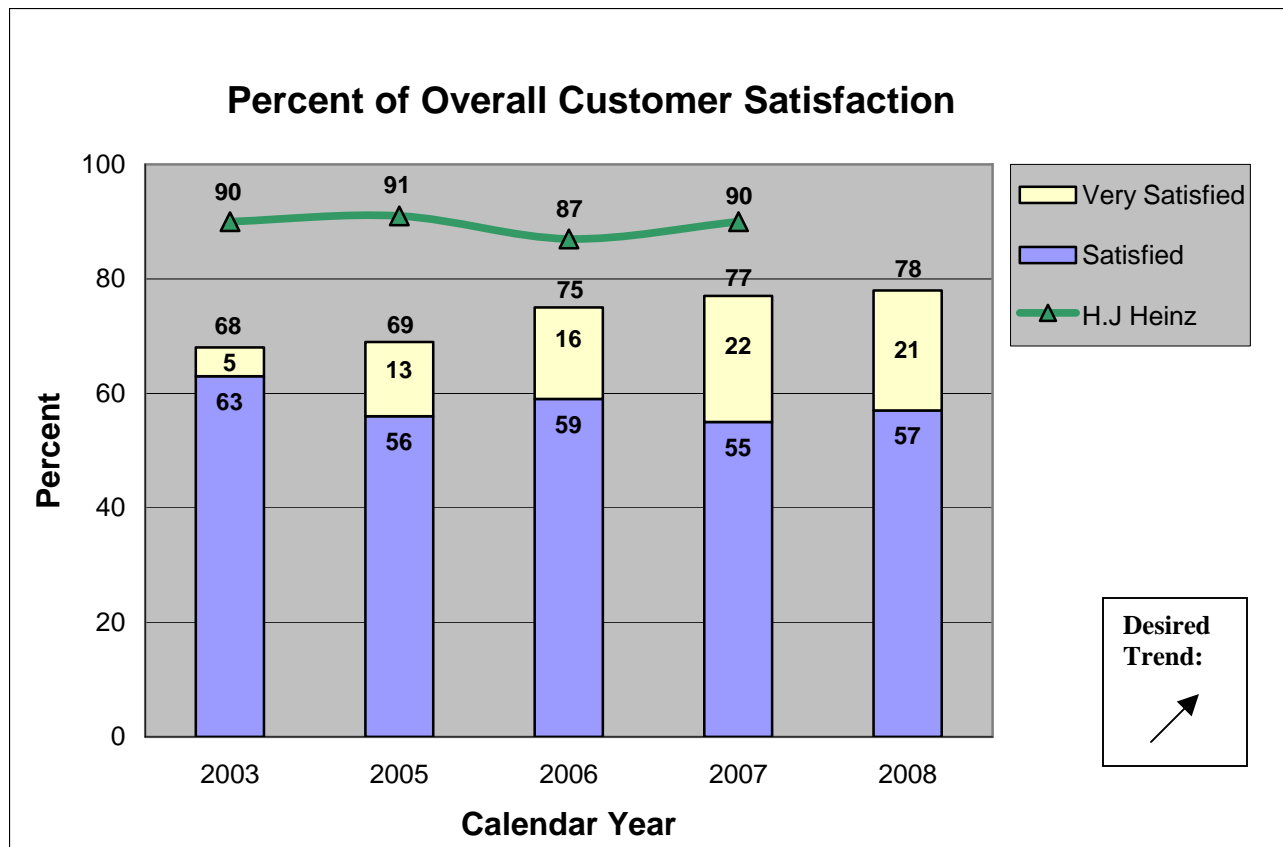
This measure tracks MoDOT's progress toward the mission of delighting its customers.

**Measurement and Data Collection:**

This is an annual measure. Data is collected from telephone interviews with more than 3,500 randomly selected adult Missourians each May. MoDOT is using H.J. Heinz as the benchmark for this measure. Based on information compiled by the American Customer Satisfaction Index, Heinz has the highest customer satisfaction rate – 90 percent – out of the 200 companies and government agencies that the ACSI scores.

**Improvement Status:**

Customer satisfaction with MoDOT rose one percent from 77 percent in 2007 to 78 percent in 2008. Since the customer satisfaction survey was first taken in 1999, the percent of people who are satisfied with MoDOT has grown 14 percent, from 64 percent to 78 percent. The percentage of people who are very satisfied with MoDOT remained roughly the same: 21 percent in 2008 as compared to 22 percent in 2007. However, over the past five years, the percentage of people who are very satisfied with MoDOT has grown 16 percent. The percentage of those who reported being dissatisfied with MoDOT dropped from 23 percent to 22 percent in the past year. MoDOT's efforts to improve road conditions, decrease highway fatalities and provide timely, accurate and understandable information likely contributed to overall customer satisfaction.



## Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

*Percent of customers who contacted MoDOT that felt they were responded to quickly and courteously with an understandable response*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

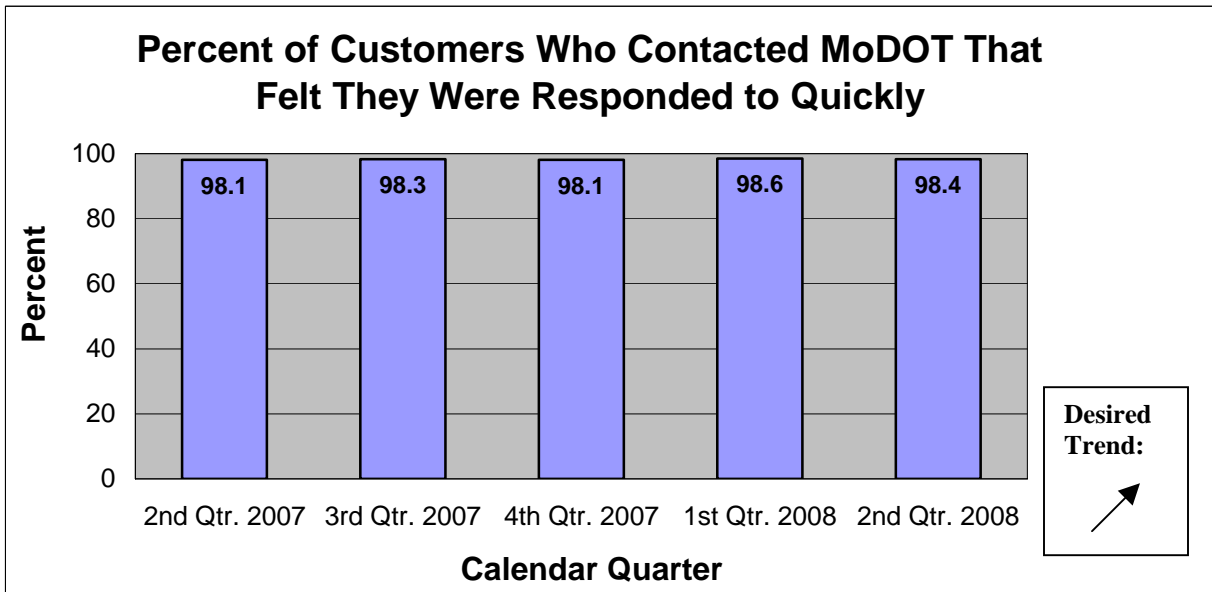
This measure indicates whether customers are comfortable with the speed, courtesy and clarity of MoDOT customer service.

**Measurement and Data Collection:**

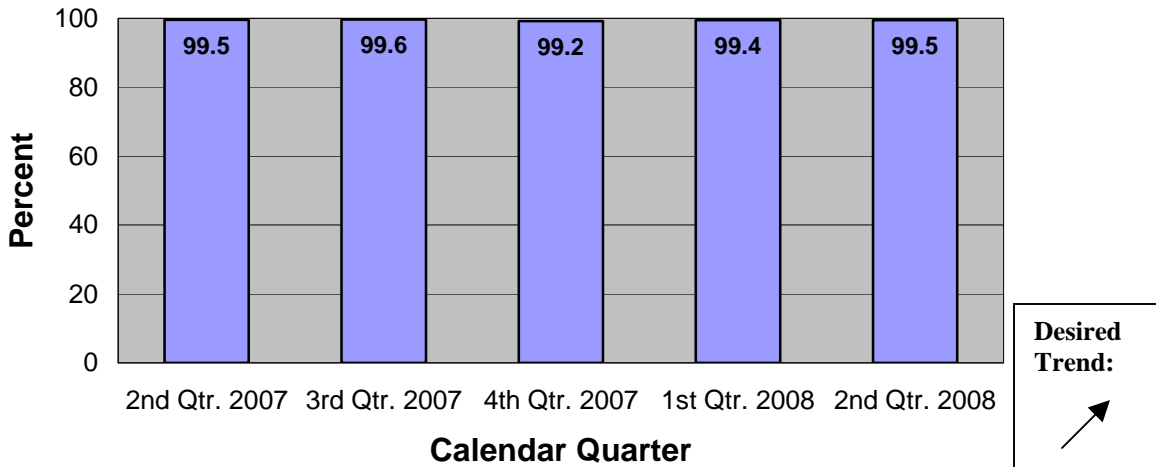
Customers who contact MoDOT Customer Service Centers are asked to complete a short telephone survey when their business with the customer service representatives is complete. Callers who agree are forwarded to an automated survey that asks three “yes or no” questions on the timeliness, accuracy and courtesy of the call.

**Improvement Status:**

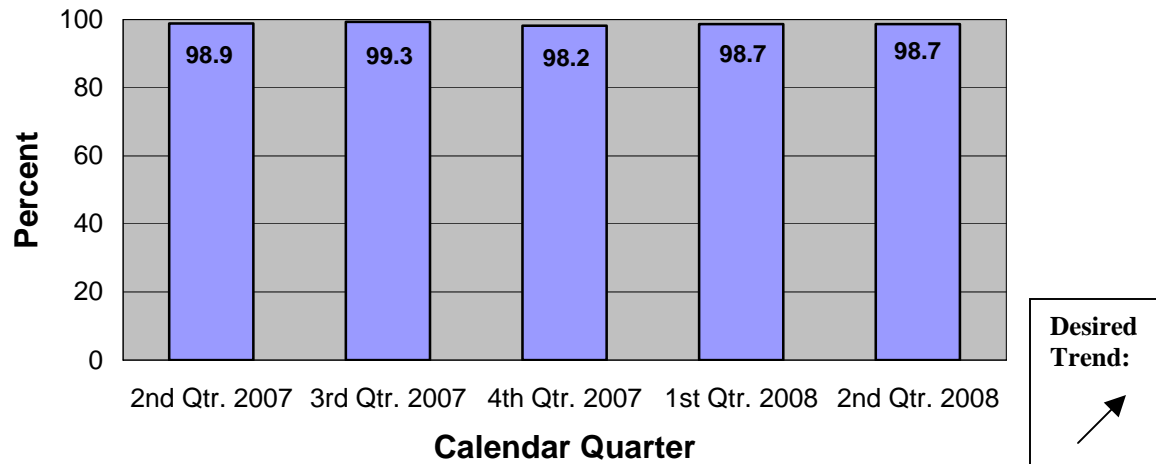
Results continue to be extremely high across the board. This data comes from 5,303 surveys taken in the past quarter. Ongoing “secret shopper” efforts encourage continued excellent customer service.



**Percent of Customers Who Contacted MoDOT That  
Felt They Were Responded To In a Personal and  
Courteous Manner**



**Percent of Customers Who  
Contacted MoDOT That Understood  
the Response Given**



## Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

### *Percent of documented customer requests responded to within 24 hours*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

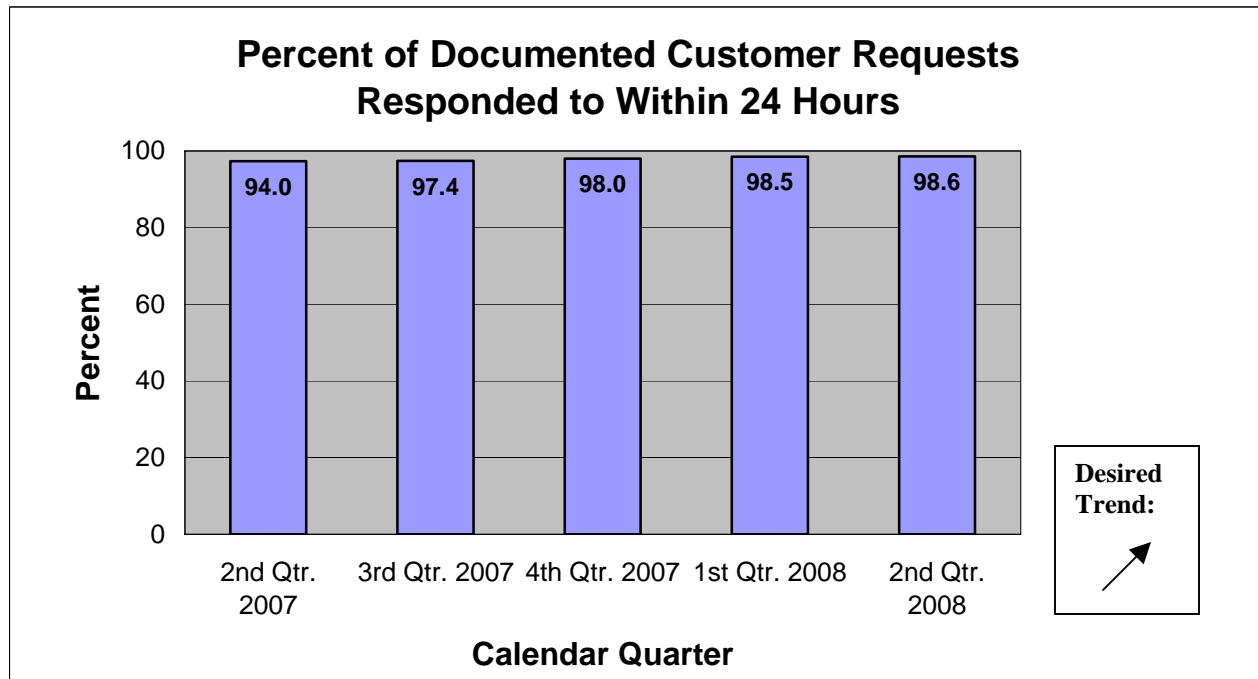
This measure tracks how quickly MoDOT responds to customer requests through the customer service centers.

**Measurement and Data Collection:**

This information comes from the customer service database, where customer requests requiring follow-up are documented from the time the call comes in until the request is responded to. This may include requests for signs, traffic signal review, pothole patching or work zone congestion. More than 90 percent of total customer requests are responded to immediately, including basic phone call transfers, questions, or requests for general information; these routine contacts are not documented here.

**Improvement Status:**

Numbers are extremely high, and continue to improve. During the second quarter several districts handled large call volumes due to flooding, including many after-hours calls. Despite these challenges, customers received an all-time high response rate. There were 9,209 documented customer requests in the quarter – another all-time high.



## Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

### *Average completion time on requests requiring follow up*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

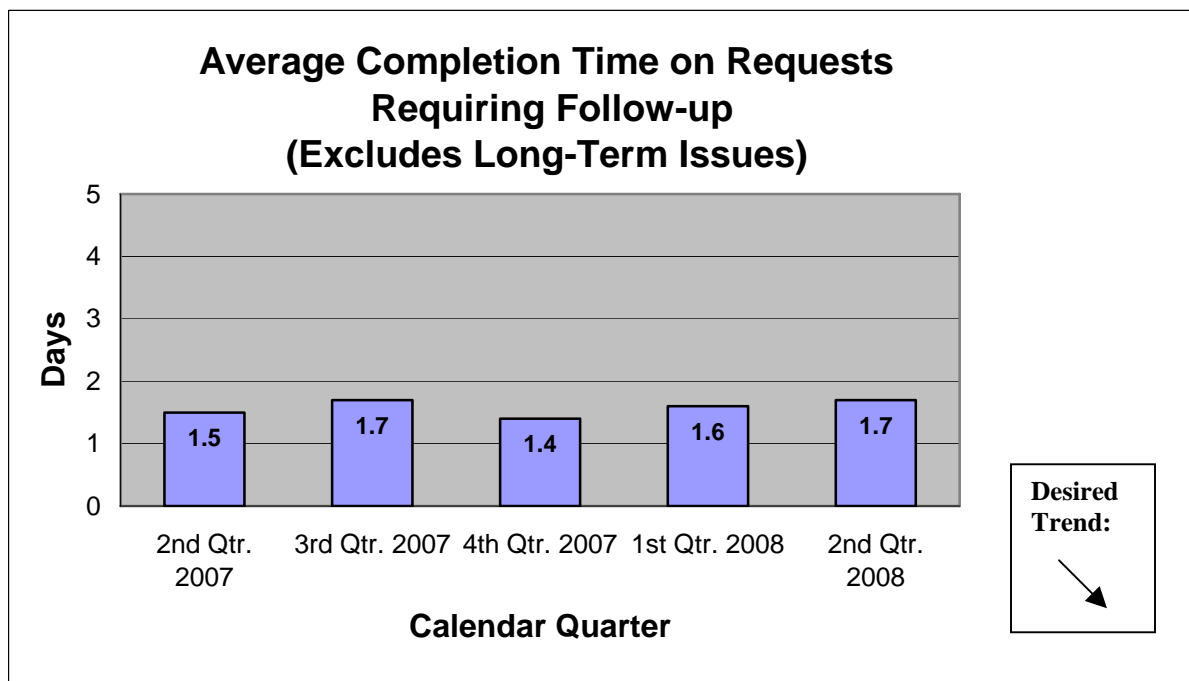
This measure tracks MoDOT's responsiveness to customer inquiries that are received through the customer service centers and documented in the database.

**Measurement and Data Collection:**

Customer requests in the customer service database are tracked for average completion time. Longer-term requests that require more than 30 days to complete are removed from the results because these longer-term requests would skew the overall results. Time is measured in working days; weekends and holidays are excluded.

**Improvement Status:**

Average completion times are up slightly. Many last-minute demands due to flooding likely had an impact on this measure. There were 9,209 documented customer requests in the quarter – an all-time high, due to flooding.





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# Partner with Others to Deliver Transportation Services

*Tangible Result Driver – Kevin Keith,  
Chief Engineer*

To be an effective leader in transportation, MoDOT must work with agencies and branches of government, including state, county, private industry and municipalities to deliver a quality transportation system that meets the needs of everyone. A coordinated transportation system requires partnerships to ensure compatible decisions are made. Partnering builds trust and ensures quality results.



## Partner With Others to Deliver Transportation Services

### *Number of dollars of discretionary funds allocated to Missouri*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Todd Grosvenor, Financial Resource Administrator

**Purpose of the Measure:**

This measure shows the amount of discretionary funds allocated to Missouri.

**Measurement and Data Collection:**

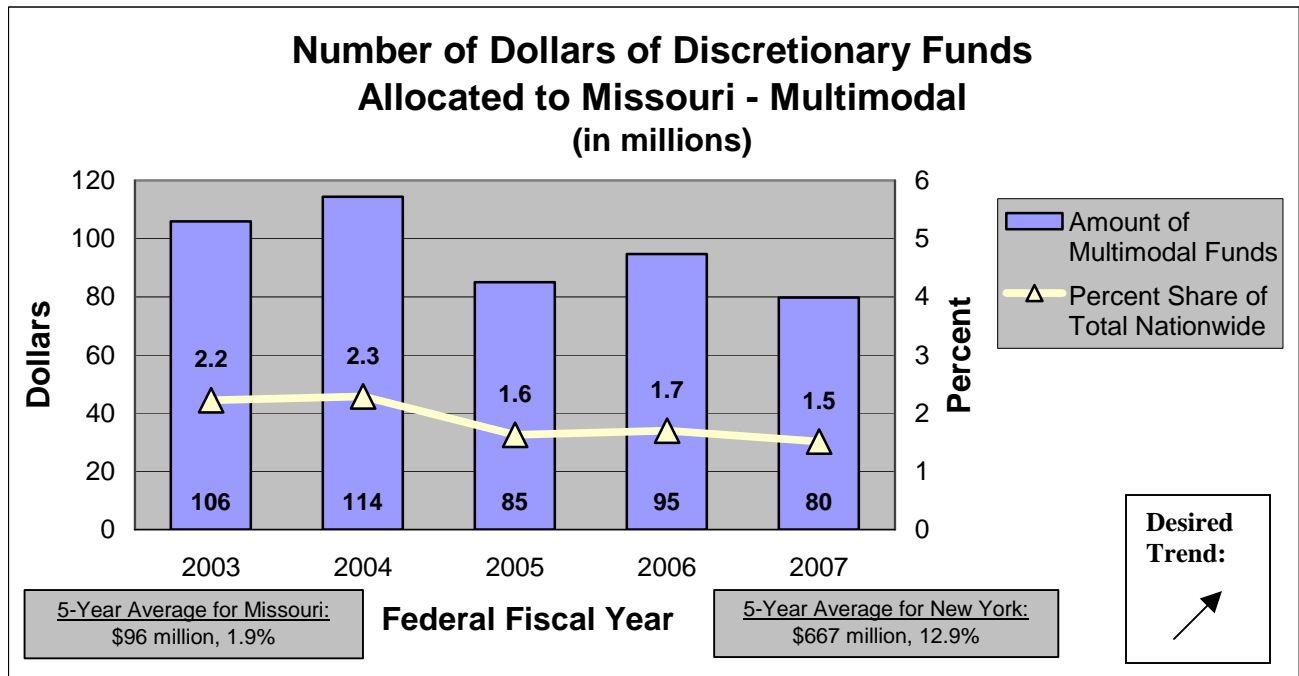
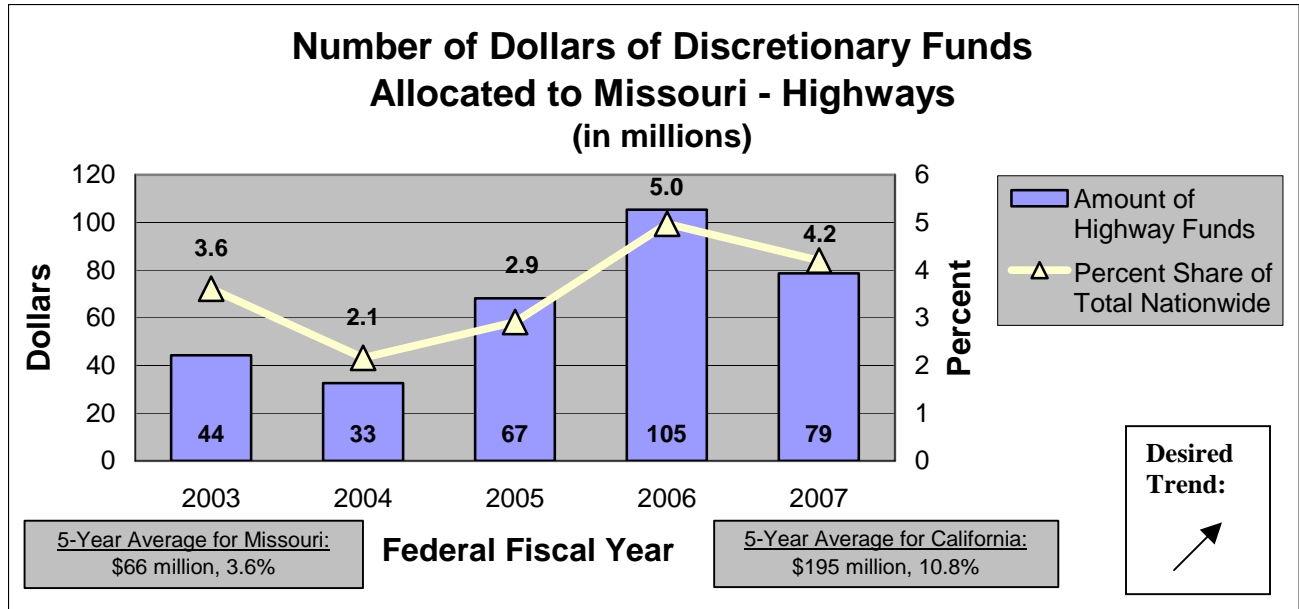
This is an annual measure updated each January. The federal government allocates discretionary funds to states for specific highway and multimodal projects. Multimodal projects include waterway, aviation and transit activities. These funds are distributed administratively for programs that do not have statutory distribution formulas. States compete for these funds, which are above the formula apportionments. Resource Management collects this information from the Federal Highway Administration, Federal Transit Administration and Federal Aviation Administration. Missouri's share of the total highway funds allocated nationwide over the last five years is 3.6 percent, which ranks sixth. The state of California received the largest share with 10.8 percent. Missouri's share of the total multimodal funds allocated nationwide over the last five years is 1.9 percent, which ranks 17th. The state of New York received the largest share with 12.9 percent.

**Improvement Status:**

Discretionary funds allocated to Missouri for highway projects decreased in 2007. This was mainly attributable to a decrease in the funds made available from the annual appropriations bill. The funds allocated to Missouri decreased 25 percent from 2006 to 2007, while the funds allocated nationwide decreased by only 10 percent.

Discretionary funds allocated to Missouri for multimodal projects decreased slightly in 2007. This was mainly attributable to a decrease in transit funds. The funds allocated to Missouri decreased 16 percent, while the funds allocated nationwide decreased by only 5 percent.

MoDOT continues to work closely with Missouri's Congressional delegates to identify specific transportation projects that are good candidates for discretionary funds.



## Partner With Others to Deliver Transportation Services

### *Percent of earmarked dollars that represent MoDOT's high priority highway projects*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Todd Grosvenor, Financial Resource Administrator

**Purpose of the Measure:**

This measure shows the percent of earmarked dollars that represent MoDOT's high priority highway projects.

**Measurement and Data Collection:**

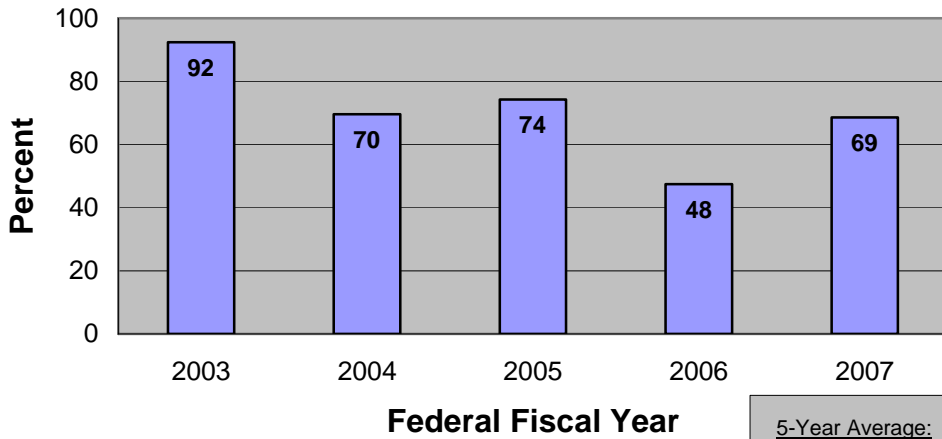
This is an annual measure updated each January. Earmarked dollars are federal funds allocated to states for specific highway projects. These funds are distributed administratively for programs that do not have statutory distribution formulas. States compete for these funds, which are above the formula apportionments. Resource Management collects this information from the Federal Highway Administration. MoDOT's high priority highway projects are identified in the Federal Priorities list that is prepared by Governmental Relations. This list is provided to Missouri's Congressional delegates.

**Improvement Status:**

Missouri's earmarked dollars for specific highway projects decreased in 2007. This was mainly attributable to a decrease in the funds made available from the annual appropriations bill. However, the percent of earmarked dollars that represent MoDOT's high priority highway projects increased. Many of the earmarked dollars were for projects identified in our Federal Priorities list. Over the last five years, MoDOT's high priority highway projects received 71 percent of the earmarked dollars.

MoDOT continues to work closely with Missouri's Congressional delegates to identify MoDOT's high priority highway projects that are good candidates for earmarked dollars.

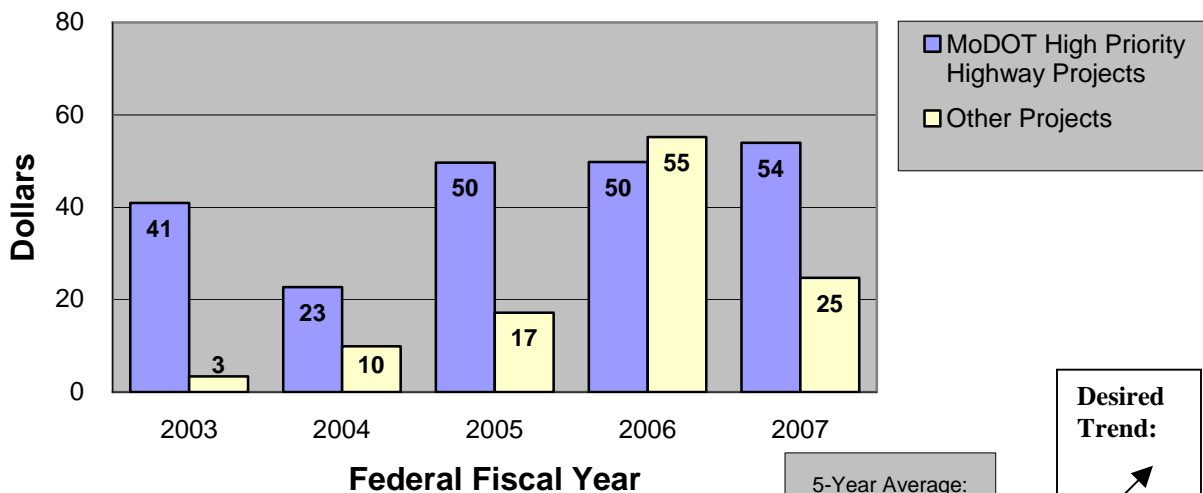
### Percent of Earmarked Dollars That Represent MoDOT's High Priority Highway Projects



**Desired Trend:**



### Number of Earmarked Dollars Representing MoDOT's High Priority Highway Projects (in millions)



**Desired Trend:**



## Partner With Others to Deliver Transportation Services

### *Number of dollars generated through cost-sharing and other partnering agreements*

**Result Driver:** Kevin Keith, Chief Engineer

**Measurement Driver:** Jay Moore, Financial Resource Administrator

**Purpose of the Measure:**

This measure monitors the effectiveness of MoDOT's cost-sharing and partnering programs. It estimates the funds invested in highway construction by cities, counties, transportation corporations and transportation development districts as a result of funds being made available for local construction by MoDOT.

**Measurement and Data Collection:**

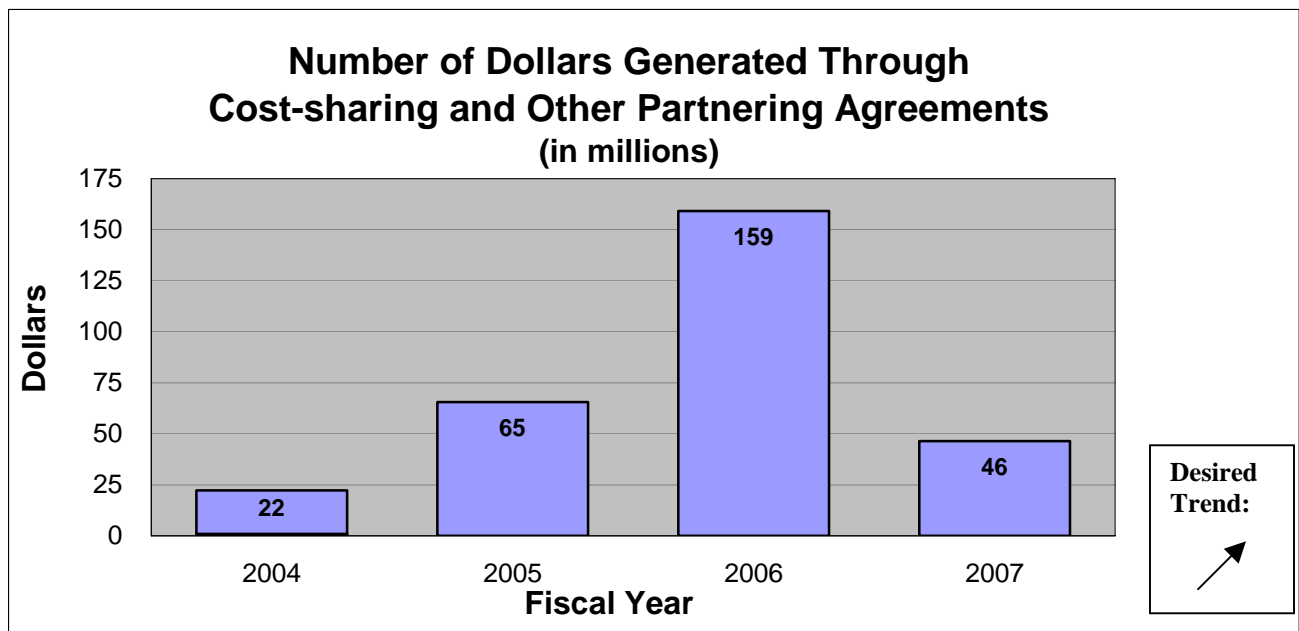
This is an annual measure updated each October. The data comes from various sources, both internal and external to MoDOT. The sources include transportation corporations, transportation development districts, MoDOT districts and MoDOT partnering programs.

Agreements included in this data set were compiled in the fiscal year in which the agreement was entered into or during which the permit was issued.

**Improvement Status:**

In FY 2006, two partnering agreements (Highways 67 and 36) were reached that accounted for \$103 million of the total shown. In FY 2007, MoDOT approved \$43.5 million of partnering projects through the cost-share program.

To advance this measure, MoDOT has implemented a marketing plan featuring workshops for district staff, as well as exhibits at appropriate conferences. The marketing workshops have been completed throughout all areas of the state. In FY 2007, MoDOT exhibited or presented at 39 events.

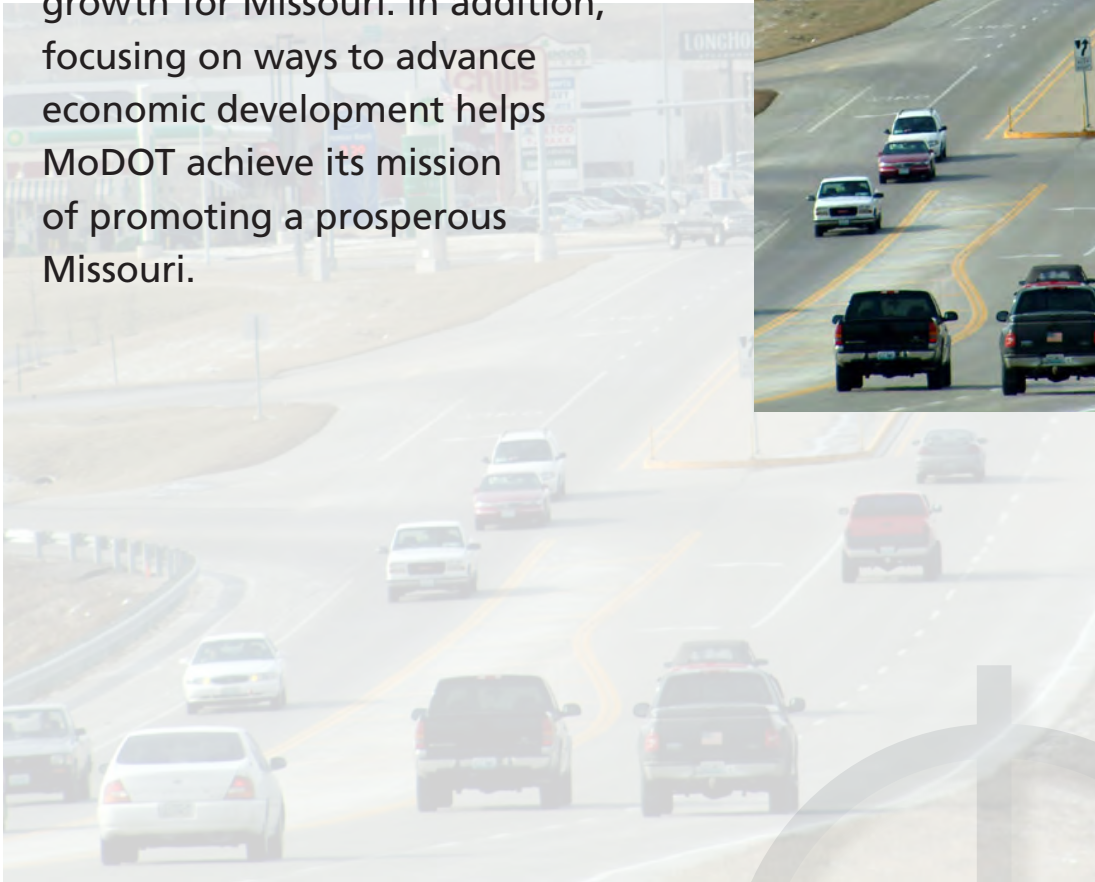




# Leverage Transportation to Advance Economic Development

*Tangible Result Driver – Roberta Broeker,  
Chief Financial Officer*

Transportation is essential to Missouri's economic well-being. It plays a critical role in creating jobs and stimulating lasting growth for Missouri. In addition, focusing on ways to advance economic development helps MoDOT achieve its mission of promoting a prosperous Missouri.



## Leverage Transportation to Advance Economic Development

### *Number of miles of new four-lane corridors completed*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**

This measure tracks the miles of additional divided highways available to the public. Access to a divided highway system supports economic development in Missouri. One of MoDOT's recent priorities has been completion of four-lane corridors in order to connect segments of highway where gaps exist.

**Measurement and Data Collection:**

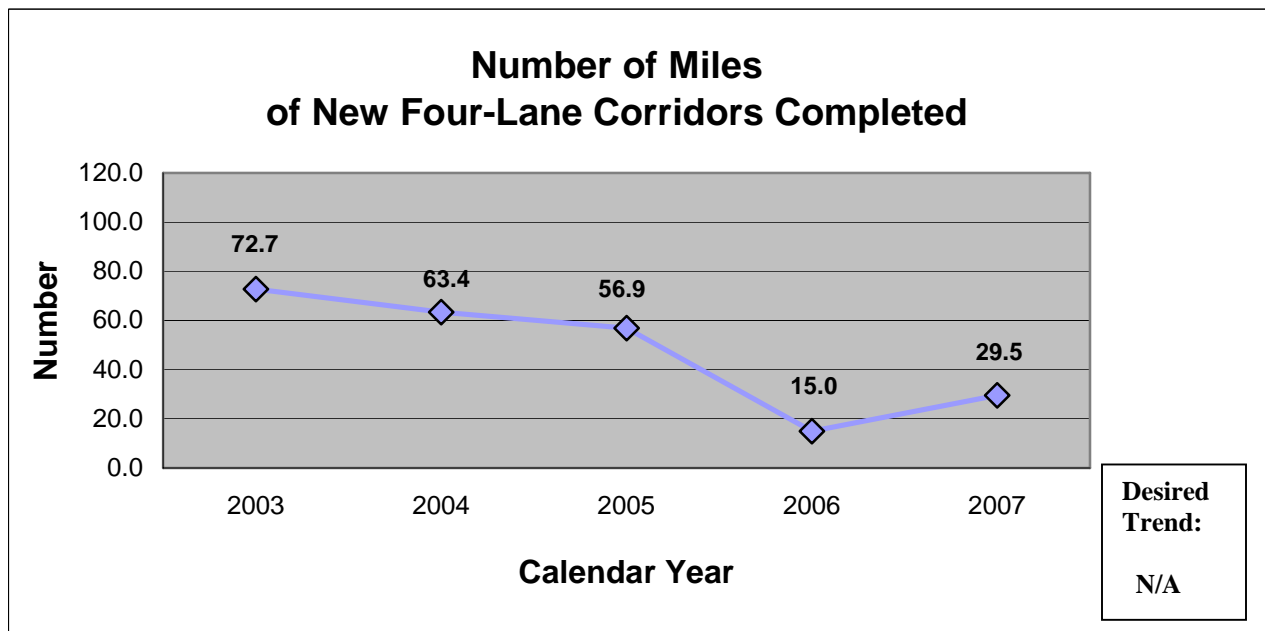
Projects that create or complete sections of dual-divided highways are identified and tracked. Completion is defined as the date the project is opened to traffic.

This is an annual measure updated each January.

**Improvement Status:**

More than 29 miles of new four-lane corridors were completed during calendar year 2007, primarily on U.S. Routes 13, 60 and 36. Progress in 2007 was nearly double that of 2006 as projects funded by Amendment 3 bonds approved by Missouri voters in November 2004 are completed. More than 180 miles of work to complete four-lane highways are included in the current five-year Statewide Transportation Improvement Program.

A recently completed MoDOT study looked at seven major economic indicators in non-urbanized counties. The indicators are county population, annual wages, household income, number of business firms, gross sales tax, real estate valuations and per capita income. Results showed that counties that have more than 15 miles of four-lane highway scored from 9 to 183 percent higher in these areas than counties with a lesser number of divided miles.





## Leverage Transportation To Advance Economic Development

### *Percent utilization of SIB & STAR loan programs*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jay Moore, Financial Resource Administrator

**Purpose of Measure:**

This measure shows the percent utilization of MoDOT's revolving loan programs, the Missouri State Infrastructure Bank and the State Transportation Assistance Revolving program. It demonstrates how well utilized these funds are by showing a ratio of how much is currently on loan versus the amount available for loan.

The Missouri Transportation Finance Corporation, a not-for-profit corporation, is Missouri's SIB. The SIB program was created by federal law in 1995 to finance both highway and non-highway projects. The STAR program finances non-highway projects such as air, water, rail, or mass transit facility construction, mass transit vehicles and vehicles for elderly or handicapped persons. STAR funding is appropriated by the General Assembly.

**Measurement and Data Collection:**

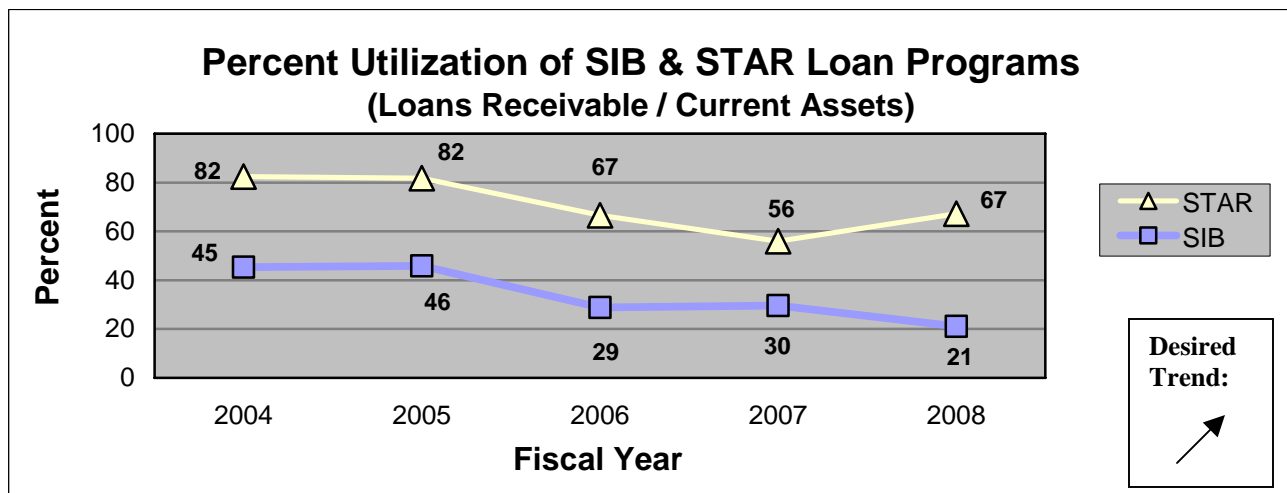
This is an annual measure. New information will be available in July 2009. The data used to calculate the amounts of funds currently on loan is collected through a database used to track the SIB and STAR loans. Amounts available to be loaned are obtained from financial reports.

**Improvement Status:**

Four SIB loans totaling \$8.10 million were disbursed during fiscal year 2008. A larger amount of loans were repaid to the SIB in FY 2008 than was disbursed. This resulted in a lower percentage of SIB funds being utilized. On June 30, 2008, the SIB had 10 loans totaling \$76.05 million approved but not disbursed, and nine loans in the discussion stage. On June 30, 2008, the SIB fund cash balance was approximately \$67.98 million with a projected low cash balance of approximately \$18.55 million for additional loans.

A STAR fund loan of \$895,100 was disbursed in FY 2008. Loan disbursements outpaced loan repayments and interest earnings on the STAR fund, resulting in a higher utilization in FY 2008. On June 30, 2008, the STAR fund had three loans totaling 1.08 million approved but not disbursed. The STAR fund cash balance on June 30, 2008 was \$1.12 million leaving only approximately \$40,000 available for additional loans.

To advance this measure and improve SIB utilization, the MTFC Board ratified a marketing plan prepared by the partnership development staff. Part of the plan adopted by the board featured marketing workshops for district staff and exhibiting at appropriate conferences. The marketing workshops have been completed throughout all areas of the state. In FY 2008, MoDOT exhibited or presented at seven events.



## Leverage Transportation to Advance Economic Development

### *Economic return from transportation investment*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Ben Reeser, Finance Manager

**Purpose of the Measure:**

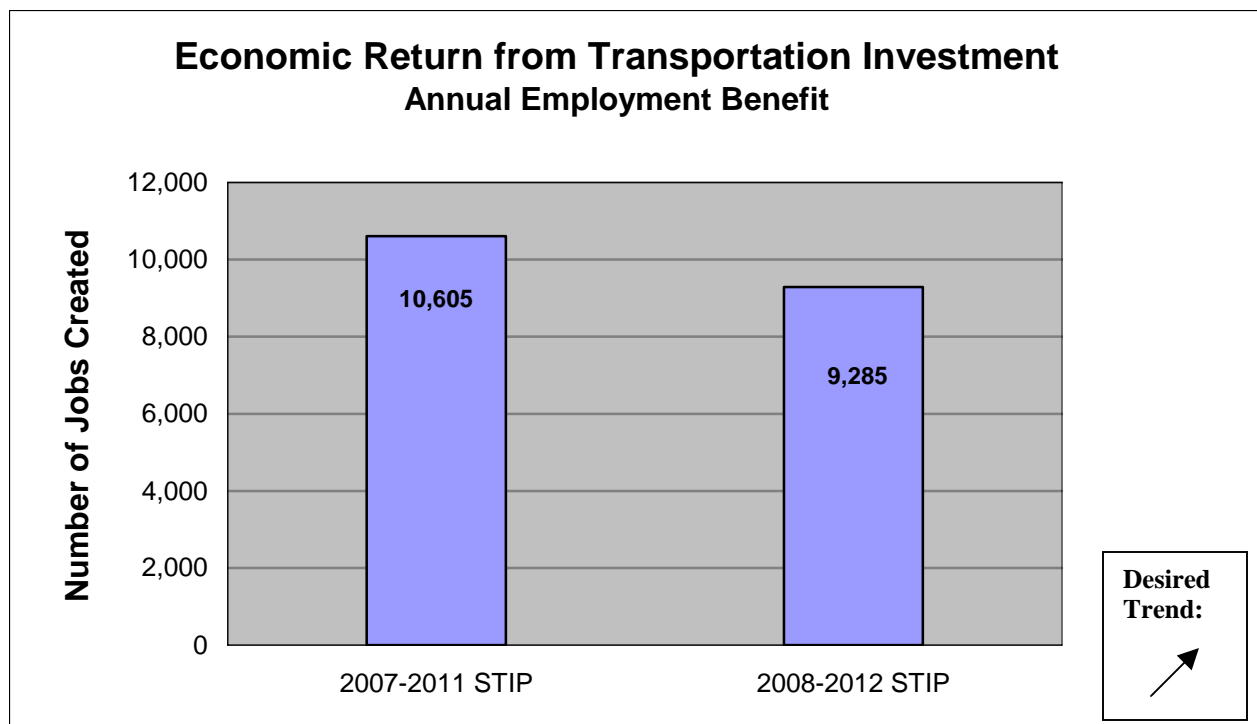
This measure tracks the economic impact resulting from the state's transportation investments. Economists have found that transportation investments affect employment, personal income and economic output.

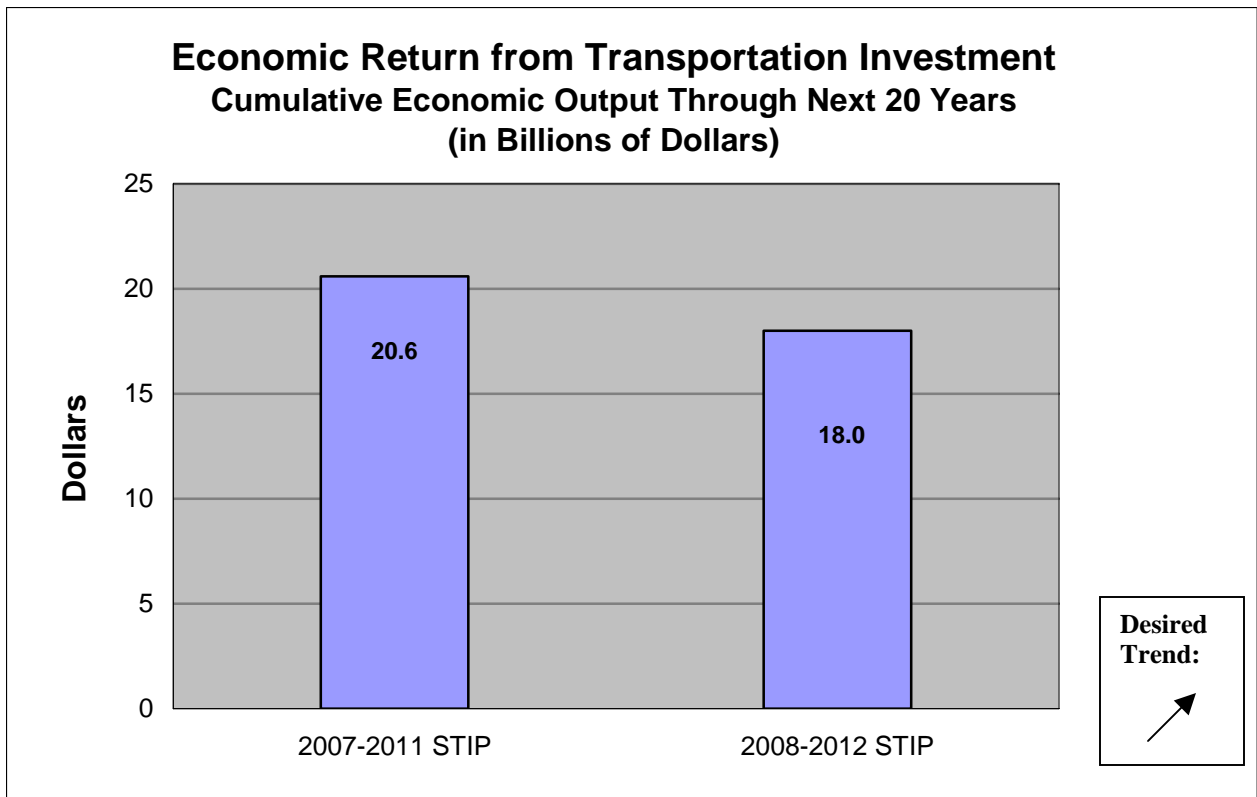
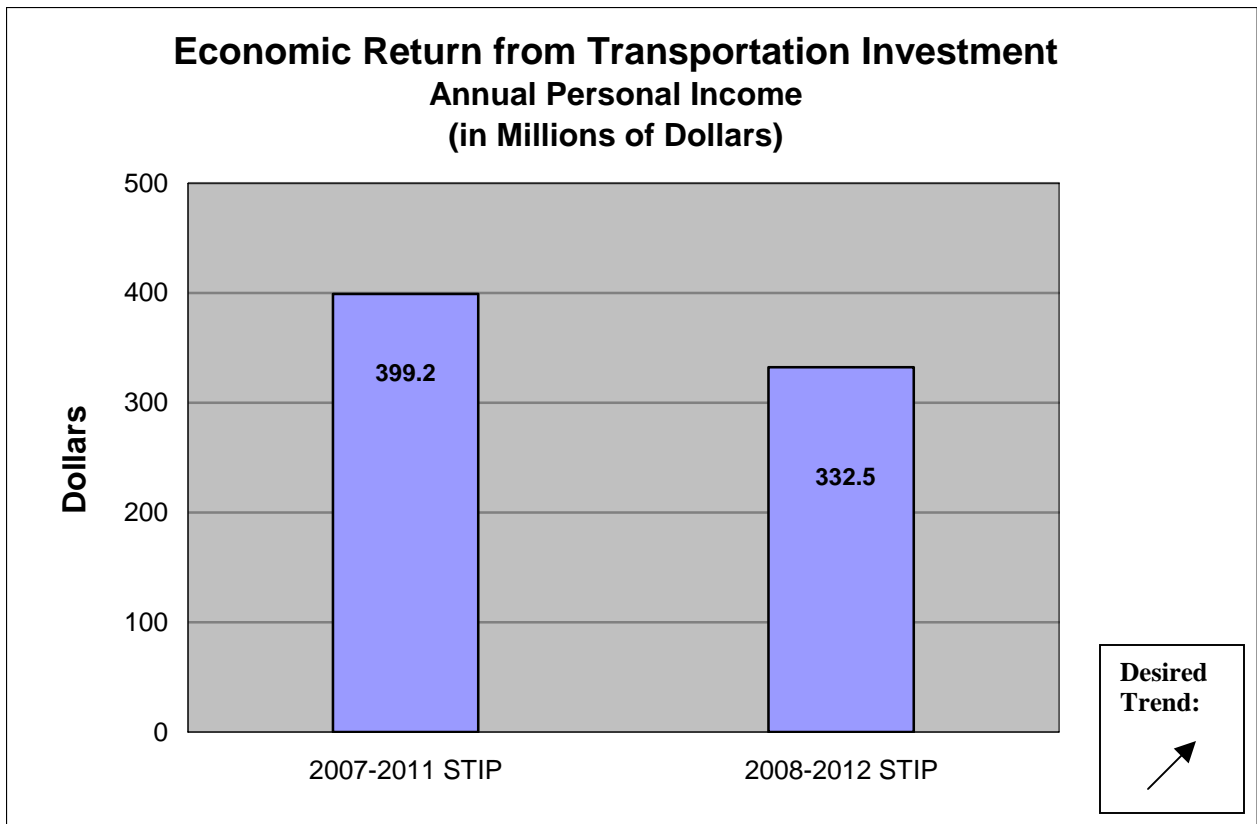
**Measurement and Data Collection:**

MoDOT works with the Department of Economic Development to perform economic impact analyses for the state's transportation investments. The analyses are performed using a model called the Regional Economic Modeling, Inc. (REMI). Through these efforts, the department can provide state and regional estimates to demonstrate employment, income and state benefits related to specific projects, corridors and program expenditures. This annual measure is updated each October.

**Improvement Status:**

The REMI model results demonstrate the strong link between transportation investment and economic development. An analysis of the Statewide Transportation Improvement Program provides a summary of economic benefits related to transportation investments over the next 20 years. The fiscal year 2008 through 2012 STIP will invest over \$5 billion in 772 transportation projects across the state. On average, STIP investments will create approximately 9,285 new jobs with an average wage of \$27,080 per job. As a result, average personal income is expected to increase by \$332.5 million. The FY 2008 through 2012 STIP projects will contribute over \$901.1 million to economic output for the state per year totaling \$18 billion over the next 20 years. This equates to \$3.56 return on every \$1 invested in transportation. The economic return for transportation investment in the 2008 through 2012 STIP declined compared to the 2007 through 2011 STIP since total dollars invested decreased from \$5.7 billion to \$5 billion. MoDOT continues to work with DED to conduct economic impact analysis for transportation investments throughout the state.





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# Innovative Transportation Solutions

*Tangible Result Driver – Mara Campbell,  
Organizational Results Director*

MoDOT values innovation. The department empowers employees and seeks input from stakeholders to generate innovative ideas. Collaboration with staff, academia and industry make unique concepts come to life so MoDOT can serve its customers better, faster and at less expense to the taxpayer.



## Innovative Transportation Solutions

### *Number and percent of research recommendations implemented*

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Bill Stone, Organizational Performance Administrator

**Purpose of the Measure:**

This measure tracks the number of completed research projects, and the percentage of implemented research recommendations, whether ideas, methods, or tools that MoDOT implements as a result of research efforts. MoDOT realizes the importance of supporting innovation and research and is driven to provide the department with the latest ideas, technologies, and solutions needed to deliver the most efficient, safe, and economical transportation system.

**Measurement and Data Collection:**

Research projects implemented include any new ideas, methods, policies, processes, standards, equipment or tools introduced for the purpose of improving the department's operation, services, or products. For this measure, research projects are categorized into two areas: 1) Information and policy guidance research, and 2) Technical, product-focused research. Both categories are reported as the number of completed activities and percent of recommendations implemented. Examples of information and policy guidance research products include determining the economic impact of highway construction or smoother pavements, or development of freight planning agendas. Technical, product-focused research projects examples include developing passing lane alternatives, or concrete curing specifications.

For these research products, the definition of implemented includes all solutions that have been or are being applied. "Percent of research recommendations implemented" is determined by dividing the number of research projects producing implementable results by the total number of research projects completed during the reporting period.

For both categories of research projects, the information and policy oriented, as well as the technical, MoDOT's elevated emphasis on strategically focused research and its implementation should result in better and more economical transportation products and services delivered. Data for this measure is collected and analyzed every six months with updates in the January and July Tracker editions.

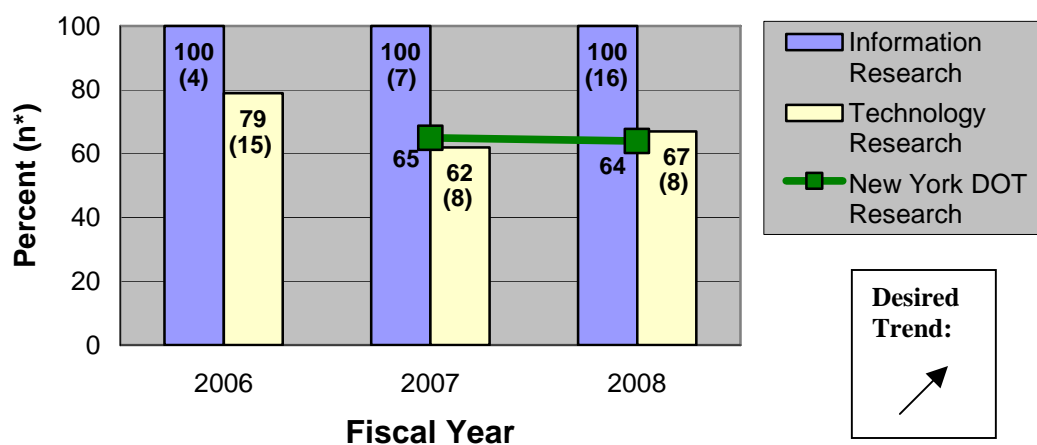
**Improvement Status:**

During fiscal year 2008, MoDOT's research program completed 28 total research projects. Sixteen projects were categorized as information and policy guidance reports and are considered implemented. Twelve projects were categorized as technical, product-focused projects. Of the twelve technical reports, eight projects produced implemented results within the department. This represents a 67 percent implementation rate for the technical report recommendations.

MoDOT's implementation rate for technical projects is slightly ahead of the New York implementation rate of 64 percent. MoDOT's Organizational Results continues to aggressively pursue research and innovations focused on addressing pertinent department needs that are closely tied to the 18 Tangible Results. This focus will lead to more usable solutions and better value. While not all research results or solutions can be implemented, MoDOT recognizes the importance and value of conducting a research program driven to make a difference.

Organizational Results worked with the Performance Advisory Teams (PAT), Division and District Leaders, Senior Management and outside researchers to identify research and performance needs for the department. The research projects were then prioritized and compared to budget constraints to outline the research program for the Department that will be administered through Organizational Results. The research program has outlined both the contract and in-house research projects for fiscal year 2009. The 2009 research program was approved on June 30, 2008.

## Number and Percent of Research Recommendations Implemented



\*(n) Indicates the number of research recommendations implemented

## Innovative Transportation Solutions

### *Number of external awards received*

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Bill Stone, Organizational Performance Administrator

**Purpose of the Measure:**

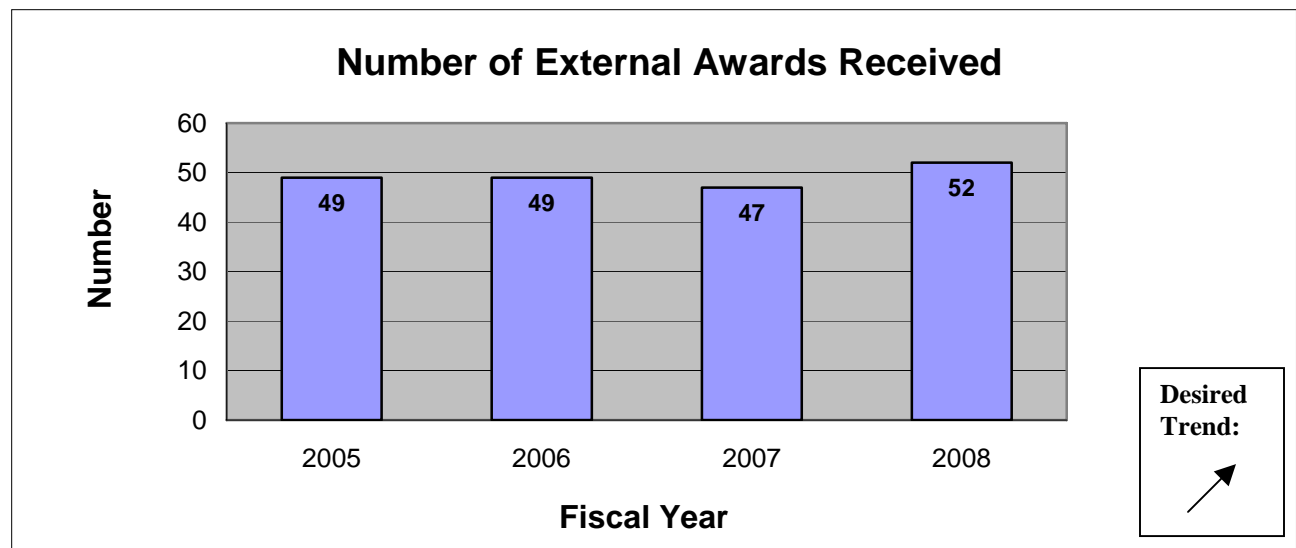
This measure tracks the number of external awards received by the department. These awards display the department's dedication and efforts towards efficiency, innovation and quality throughout the organization. This information enables the department to measure progress and encourage further participation in award programs. It also provides opportunities for the department to increase public awareness of department activities.

**Measurement and Data Collection:**

Each district and division office tracks the awards presented to the department by external organizations. This includes all awards presented to individuals, teams, districts, divisions and MoDOT as a whole. Data for this measure is updated quarterly.

**Improvement Status:**

In the fourth quarter of fiscal year 2008, MoDOT received 13 awards. A highlight from the fourth quarter of fiscal year 2008, State Representative Todd from the Southeast area recognized the hard work of MoDOT maintenance buildings in Kennett, Qulin and Campbell for their inclement weather efforts. MoDOT continues to enter various competitions to have its work judged against the efforts of other organizations.





## Innovative Transportation Solutions

### *Percent of best practices by implementation status*

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Bill Stone, Organizational Performance Administrator

**Purpose of the Measure:**

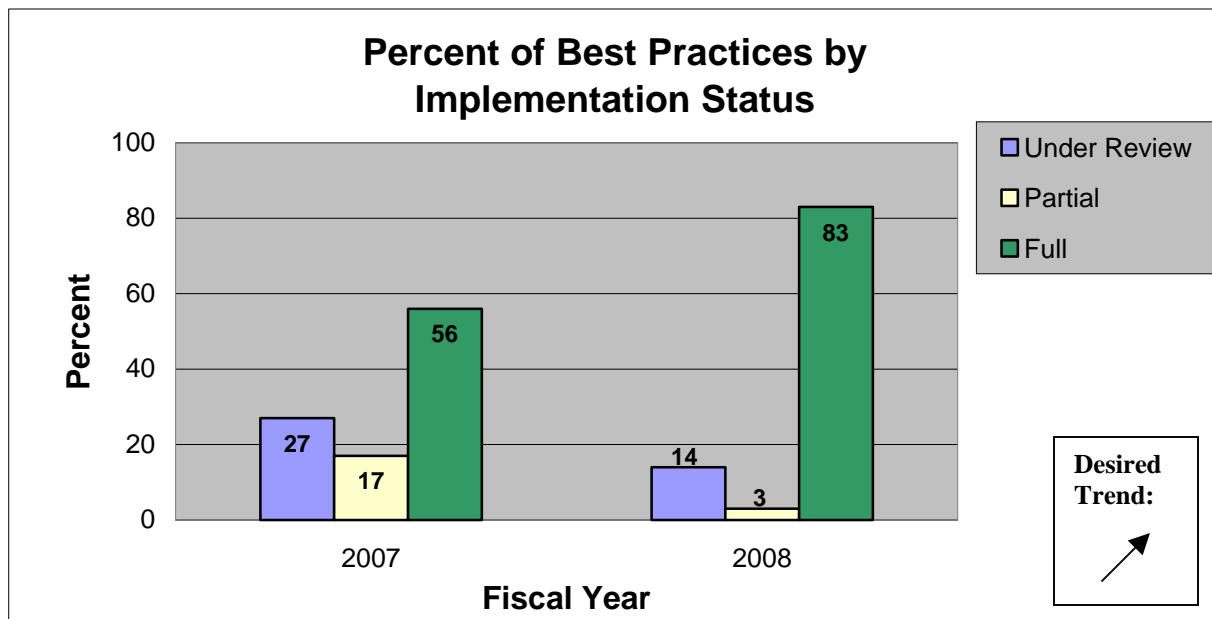
This measure tracks the percent of best practices implemented within MoDOT. Best practices show how MoDOT employees are applying innovation to improve daily operations.

**Measurement and Data Collection:**

MoDOT uses a simple five-question submission form for employees to share how they have improved the ways of accomplishing daily work. Submissions are evaluated and verified by managerial and technical staff. Those submissions approved as best practices are shared with MoDOT employees through online and printed publications. Every six months, division and district managers report best practice implementation status. This measure will have updates in the July and January Tracker editions.

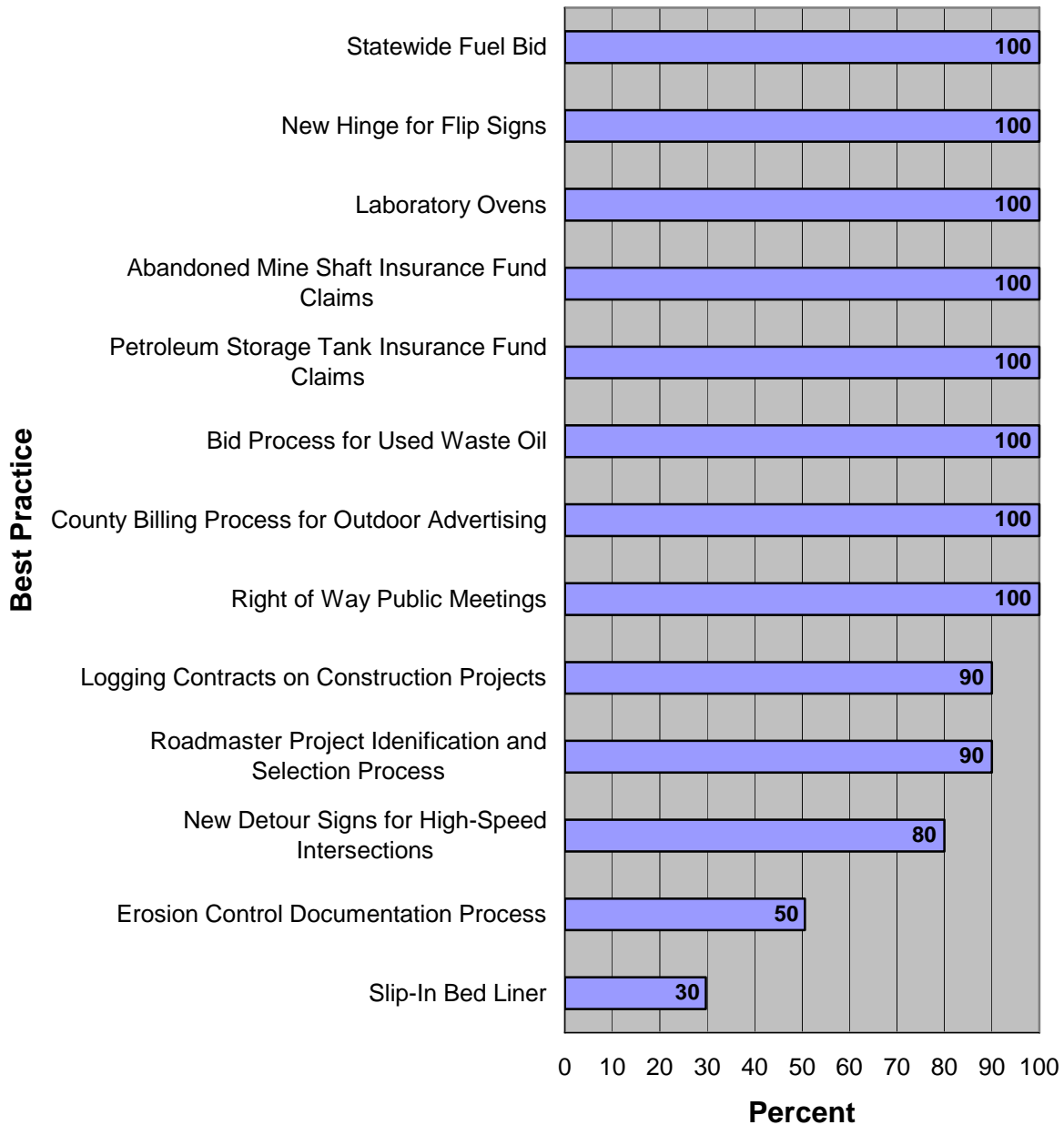
**Improvement Status:**

During fiscal year 2008, MoDOT's Solutions at Work has verified and shared 19 best practices with department employees. Six of those best practices have been shared within the past thirty days resulting in insufficient time to implement and are not part of this survey cycle. Overall, 83 percent of the best practices have been fully implemented with 3 percent partially implemented and 14 percent still under review. With 86 percent of best practices partially or fully implemented, MoDOT is aggressively taking advantage of best practices. The 14 percent still under review is partially due to the need to customize some best practices to better fit operational or regional needs. The improved implementation rate during the fiscal year is attributable to stricter evaluation criteria and improved statewide communication of best practices through monthly videoconferences. Implementation of these best practices resulted in a net savings of nearly \$1.5 million. Most notably the department saved more than \$1 million through a process to recover costs associated with removal of underground petroleum storage tanks. Logging contracts on transportation projects generated more than \$203,000 and a revised county billing process for outdoor advertising eliminated three full-time positions saving the department's personal services budget nearly \$140,000.



## Percent of Implementation by Best Practice

FY 2008\*



\* Best practices too recent to include in this survey cycle are: a modified shouldering machine, a sign mounting system, a mud pump t-handle, concrete saw wheels, a stream mitigation bank and a breakaway sign tool.

## Innovative Transportation Solutions

### *Number of dollars saved by increasing MoDOT's productivity*

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Jen Harper, Organizational Performance Engineer

**Purpose of the Measure:**

This measure enables MoDOT to assess its productivity by tracking cost savings indicative of practical design, value engineering, Performance Plus and good engineering judgment.

**Measurement and Data Collection:**

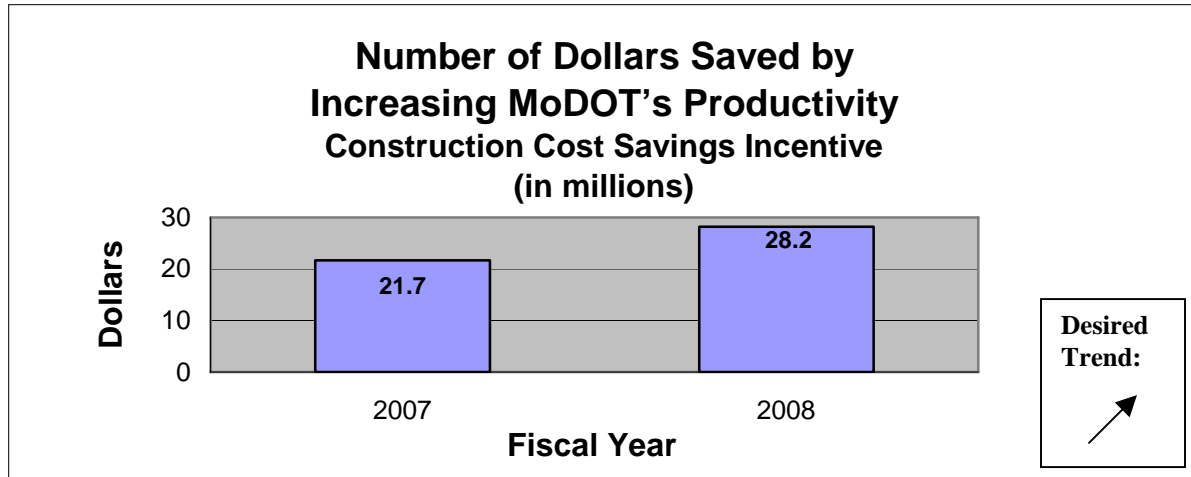
The cost-saving methods used by MoDOT are so broad that this measure focuses on savings measured through the Performance Plus program. In addition to the Construction Cost Savings, the Performance Plus program added two more incentives (Injury Reduction and Project Scoping and Estimating) in fiscal year 2008. The Construction Cost Savings and the Project Scoping and Estimating incentives are verified quarterly, while the Injury Reduction incentive is verified on a semi-annual basis. The number of dollars saved as well as the amount paid out to eligible employees is calculated for each of the incentives. Note that in the Construction Cost Savings incentive, the savings are calculated based only on those project offices that qualified for the incentive, while Project Scoping and Estimating and the Injury Reduction calculations are based on all of the districts whether or not they qualified. For each of the incentives, the amount paid out is then subtracted from the amount saved to get a final savings. These savings are reported in the quarter that the incentives are paid out to the employees. Data for this measure is updated quarterly.

**Improvement Status:**

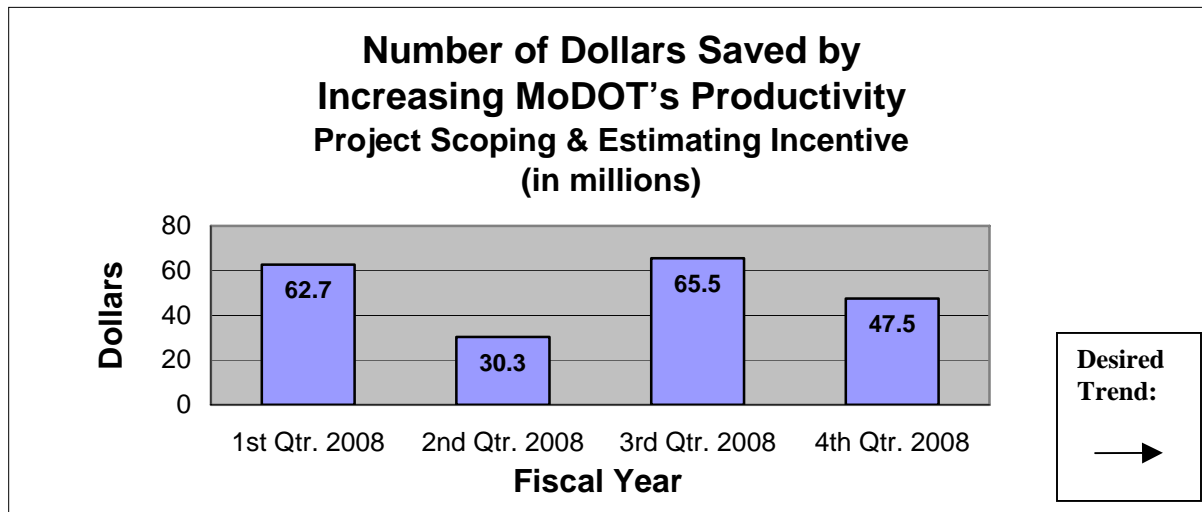
In the fourth quarter of fiscal year 2008, MoDOT saved an additional \$8.3 million through the construction cost savings incentive. In fiscal year 2008, MoDOT saved \$28.2 million through that incentive as compared to \$21.7 million in 2007.

In the fourth quarter of fiscal year 2008, an additional \$47.5 million was saved through the project scoping and estimating incentive. In fiscal year 2008, MoDOT has calculated a savings of \$205.9 million through the project scoping and estimating incentive.

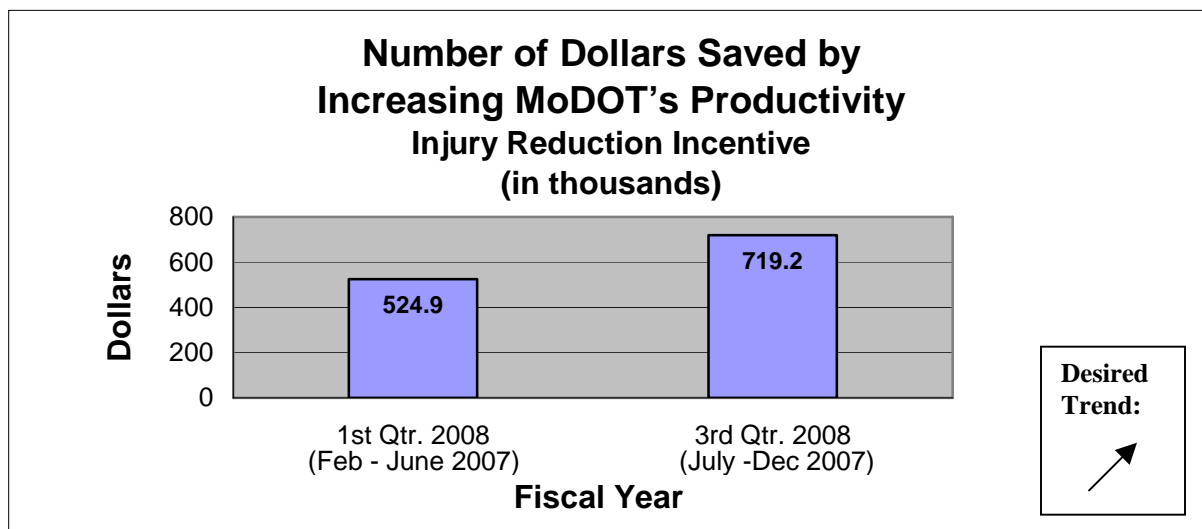
The Injury Reduction Incentive did not have a payout this quarter.



Note: In the Construction Cost Savings, the savings are calculated based only on those project offices that qualified for the incentive.



Note: The desired trend in the Project Scoping and Estimating Incentive is to keep the variance between the STIP estimate and low bid amount to 0 percent.



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# Fast Projects That Are of Great Value

*Tangible Result Driver – Dave Nichols,  
Director of Program Delivery*

MoDOT customers expect that transportation projects be completed quickly and provide major improvements for travelers. MoDOT will honor project commitments because it believes in integrity.



## Fast Projects That Are of Great Value

### *Percent of estimated project cost as compared to final project cost*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Renate Wilkinson, Planning and Programming Engineer

**Purpose of the Measure:**

This measure determines how close MoDOT's total program completion costs are to the estimated costs.

**Measurement and Data Collection:**

MoDOT determines the completed project costs and compares them to the estimated costs. The completed project costs are reported during the fiscal year in which the project is completed.

Project costs include design, right of way purchases, utilities, construction, inspection and other miscellaneous costs. The estimated cost is based on the amount included in the most recently approved Statewide Transportation Improvement Program. Completed costs include actual expenditures. The costs do not include those that might result from any legal claims, which are rare occurrences, regarding the projects after they are completed. Positive numbers indicate the final (completed) cost was higher than the estimated cost.

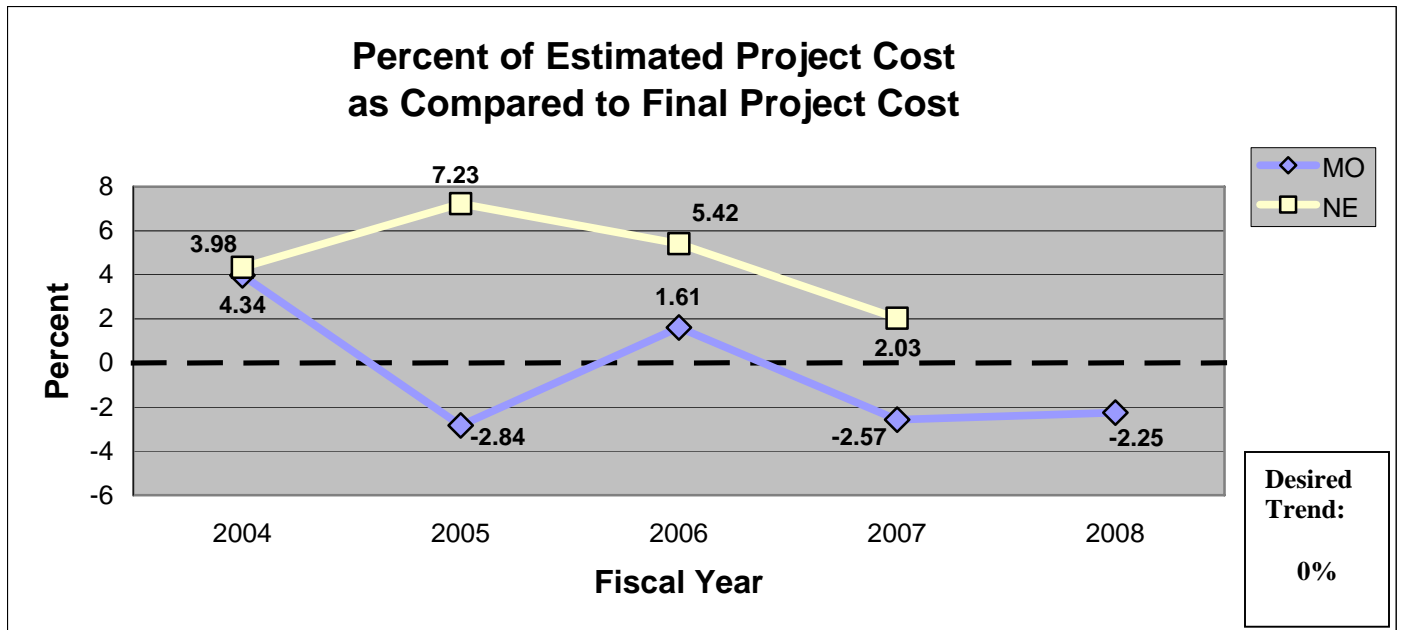
This is an annual measure updated each quarter. In November of each year, this data is provided to the Missouri Legislature through the Report to the Joint Committee on Transportation Oversight.

**Improvement Status:**

As of June 30, 2008, for fiscal year 2008, a total of 543 projects were completed at a cost of \$1.2467 billion. This represents a deviation of -2.25 percent or \$28.6 million less than the estimated cost of \$1.2753 billion. The final fiscal year 2008 value will be presented in the next Tracker. There may be projects that have adjustments pending, which could cause a slight change in the values presented here.

District construction budgets are adjusted based on variation from estimated costs. The ideal status is no deviation in the estimated vs. final project cost, or 0 percent. For projects completed in the five-year period from 2004 to 2008, final costs have been within 0.7 percent of estimated costs.

While a number of states track construction costs, few provide data for total project costs. Fewer still compare estimated total project costs to final total project cost. The following graph shows how MoDOT performance compares with neighboring Nebraska. In 2004, the performance of both states was nearly the same. In other years, it varied substantially. Data for Nebraska is updated annually.



Positive numbers indicate the final (completed) cost was higher than the estimated cost.

Data from Nebraska Department of Roads, one-year schedule of highway improvement projects.

Data based on projects completed as of June 30, 2008. There may be a slight change in the 2008 value due to projects with pending adjustments.

## Fast Projects That Are of Great Value

### *Average number of years it takes to go from the programmed commitment in the Statewide Transportation Improvement Program to construction completion*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Machelles Watkins, Transportation Planning Director

**Purpose of the Measure:**

This measure monitors how quickly projects go from the programmed commitment to construction completion.

**Measurement and Data Collection:**

MoDOT compares how long it takes from when the project is added to the Statewide Transportation Improvement Program (STIP) to when the project is completed. Data is categorized by the type of work, and distinguishes between design and construction stages.

This is an annual measure, and data is updated in October.

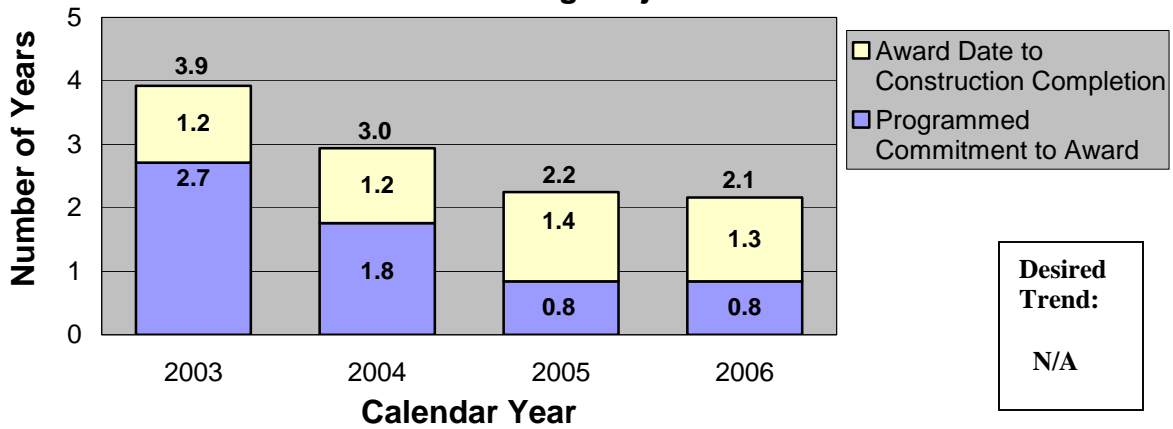
**Improvement Status:**

In general, resurfacing and safety projects take the least amount of time to develop and complete, around two years. New or improved bridge projects take more time, around four years. New or expanded highways take yet more time, from five to eight years. Major bridge projects take the most time, from seven to 11 years to develop and complete.

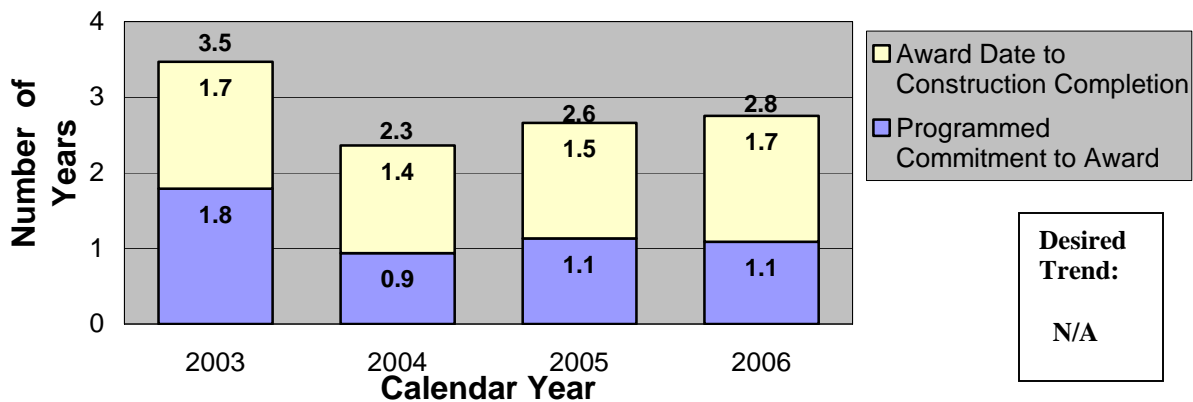
Design time for New/Improved Bridges increased from an average of 1.9 years to 2.8 years. This is due to an ongoing effort to fully program the first three years of the STIP. The construction time average for New/Expanded Highways increased from an average of 3.2 years to 3.9 years. Projects with unusually long construction periods have been identified and are being coordinated with other MoDOT divisions to pinpoint causes or issues relating to these projects. Data samples for Major Bridges are usually small, which allows for one to two projects to affect the averages that are reported. In 2005, only two Major Bridge projects were completed, compared with 10 projects in 2006. Year-to-year changes in Major Bridge averages are the result of these small data samples.



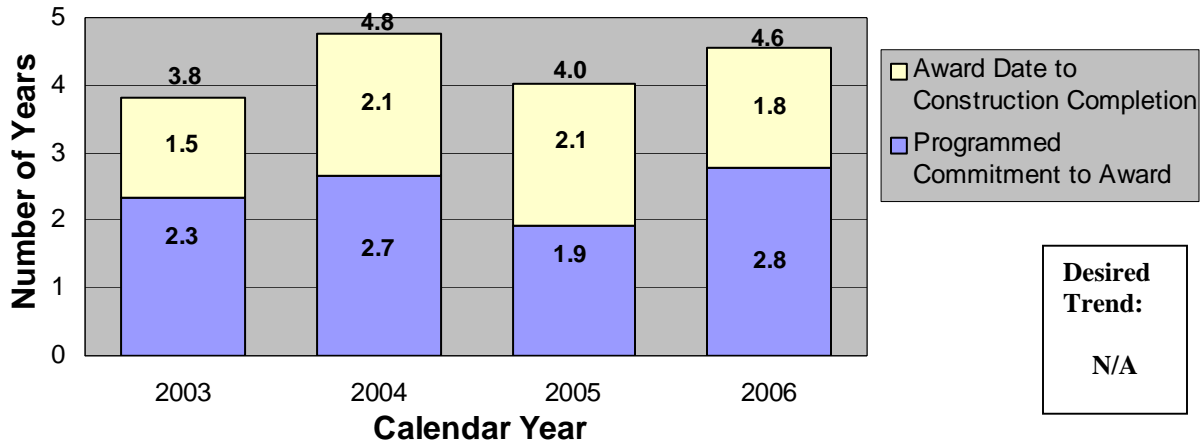
**Average Number of Years it Takes to Go from the  
Programmed Commitment in the STIP to  
Construction Completion  
Resurfacing Projects**



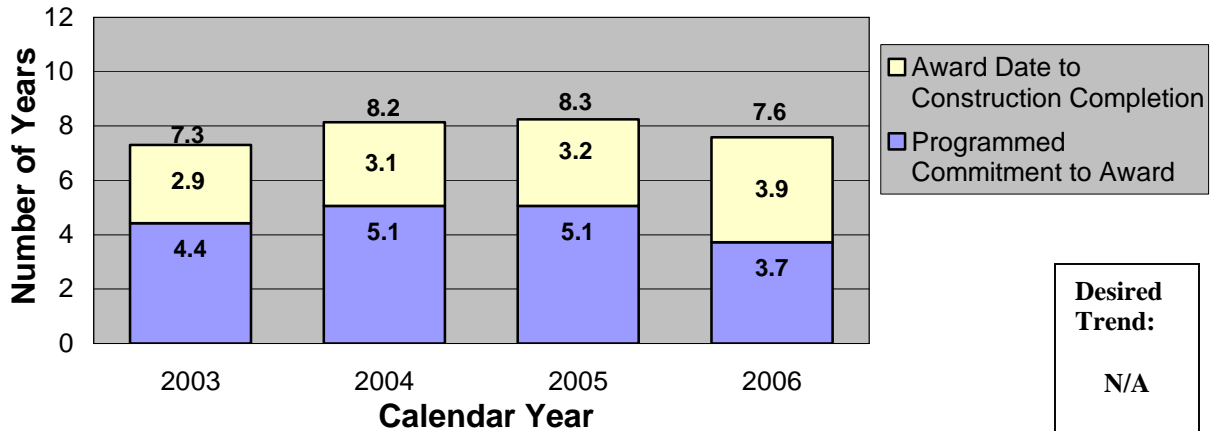
**Average Number of Years it Takes to Go from the  
Programmed Commitment in the STIP to  
Construction Completion  
Safety and Other Projects**



**Average Number of Years it Takes to Go from the  
Programmed Commitment in the STIP to  
Construction Completion  
New/Improved Bridge Projects**

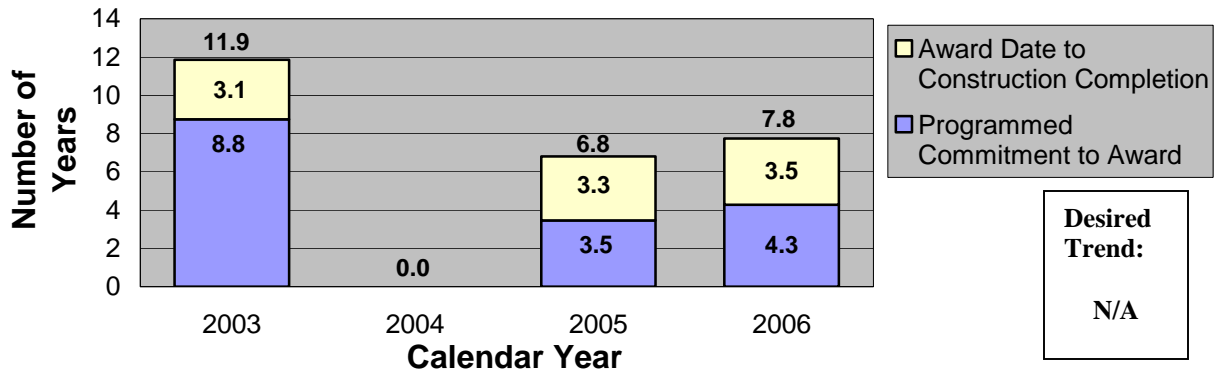


**Average Number of Years it Takes to Go from the  
Programmed Commitment in the STIP to Construction  
Completion  
New/Expanded Highway Projects**



# **Average Number of Years it Takes to Go from the Programmed Commitment in the STIP to Construction Completion**

## **Major Bridge Projects**



## Fast Projects That Are of Great Value

### *Percent of projects completed within programmed amount*

**Results Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Dave Ahlvers, State Construction & Materials Engineer

**Purpose of the Measure:**

The measure tracks the percentage of projects completed within the programmed amount. It includes separate categories for projects over and under one million dollars.

**Measurement and Data Collection:**

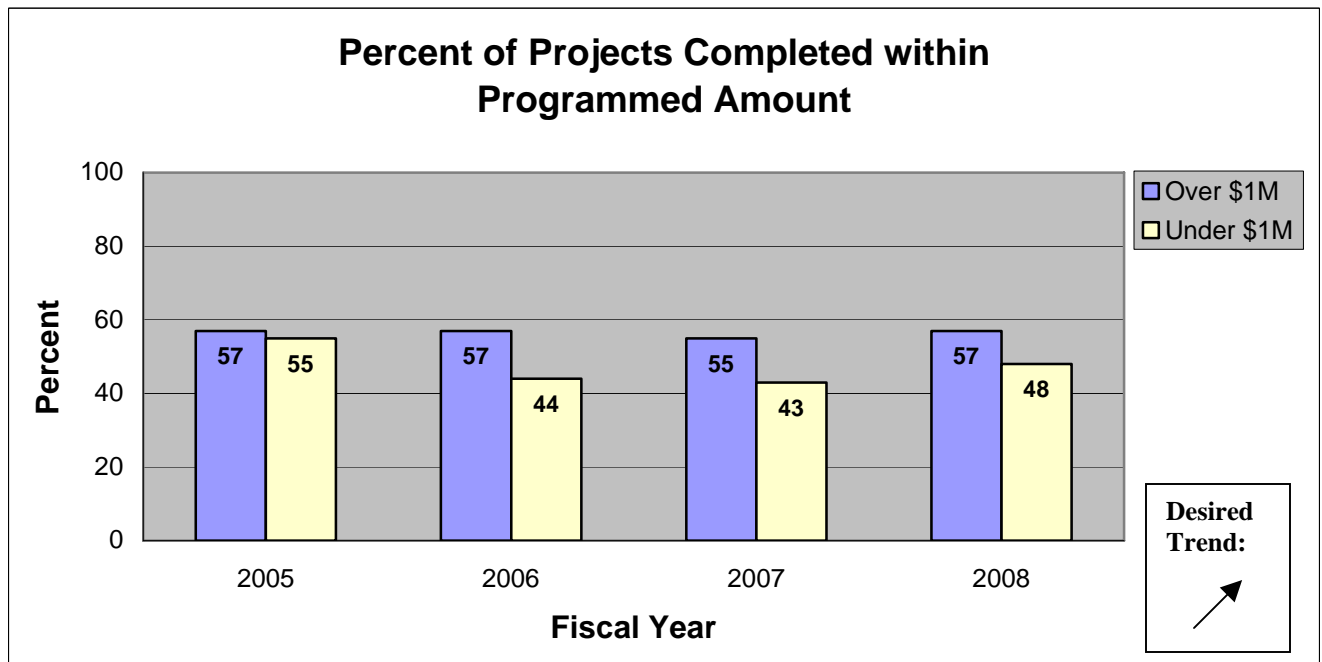
The completed project cost is compared to the estimated cost for each project. The percentage of projects completed within the estimated cost is gathered from across the state.

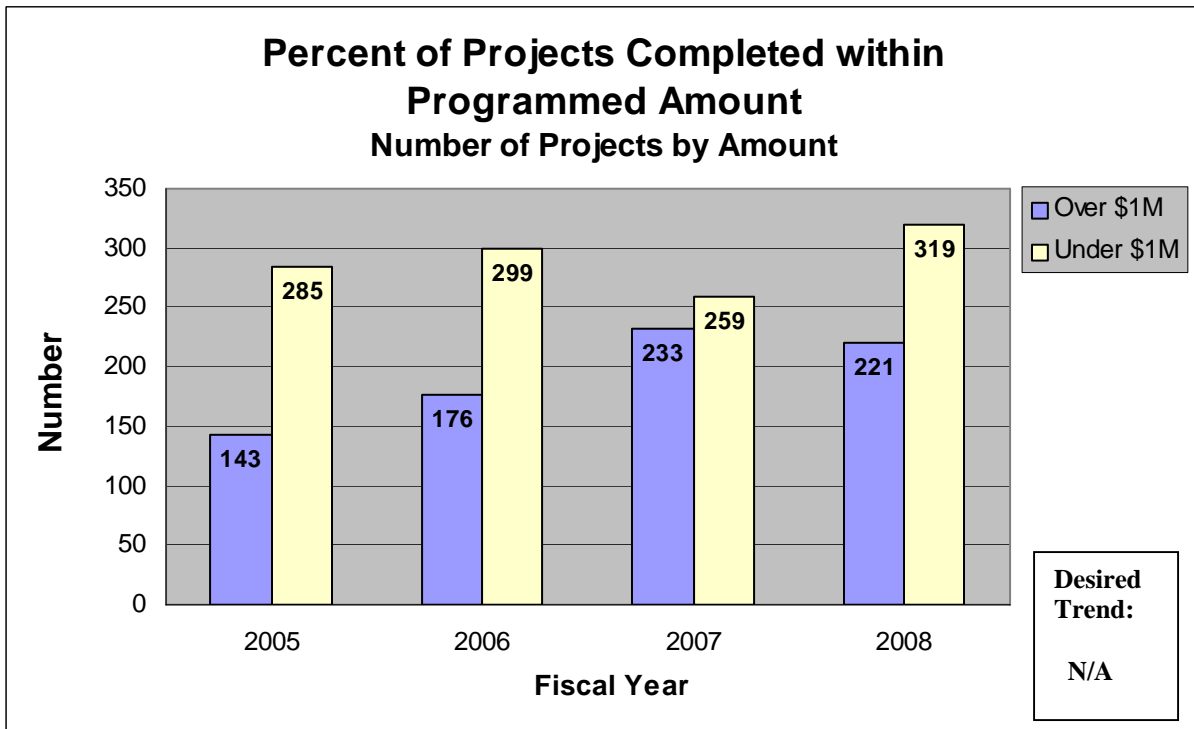
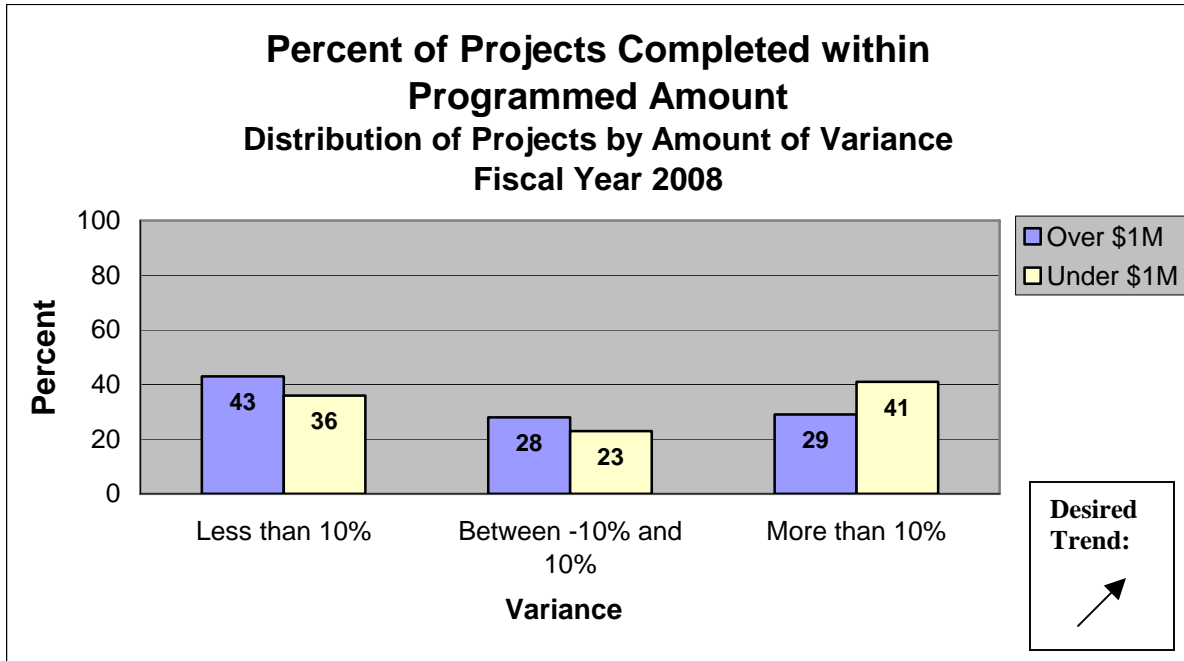
Project costs include design, right-of-way purchases, utilities, construction payments, inspection and other miscellaneous costs.

This is an annual measure updated each quarter.

**Improvement Status:**

MoDOT would like to see all projects completed within the programmed amount. The goal is to deliver projects at the programmed amount, allowing the greatest number of projects to be built with the funding available. MoDOT's data indicates that there is a great deal of deviation among individual projects with half over and half under budget. In fiscal year 2008, 57 percent of projects programmed over \$1 million were completed within the budgeted amount, while 48 percent of projects under \$1 million came in at or below budget. Emphasis has been placed on scoping projects and developing estimates that represent the true cost of delivering the projects. MoDOT is striving to deliver quality projects cheaper by using practical design and by encouraging the use of value engineering.





## Fast Projects That Are of Great Value

### *Percent of projects completed on time*

**Results Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Dave Ahlvers, State Construction & Materials Engineer

**Purpose of the Measure:**

This measure tracks the percentage of projects completed by the commitment date established in the contract. Adjustments to the completion date are made when additional work is required or for unusual weather occurrences. It indicates MoDOT's ability to complete projects by the agreed upon date.

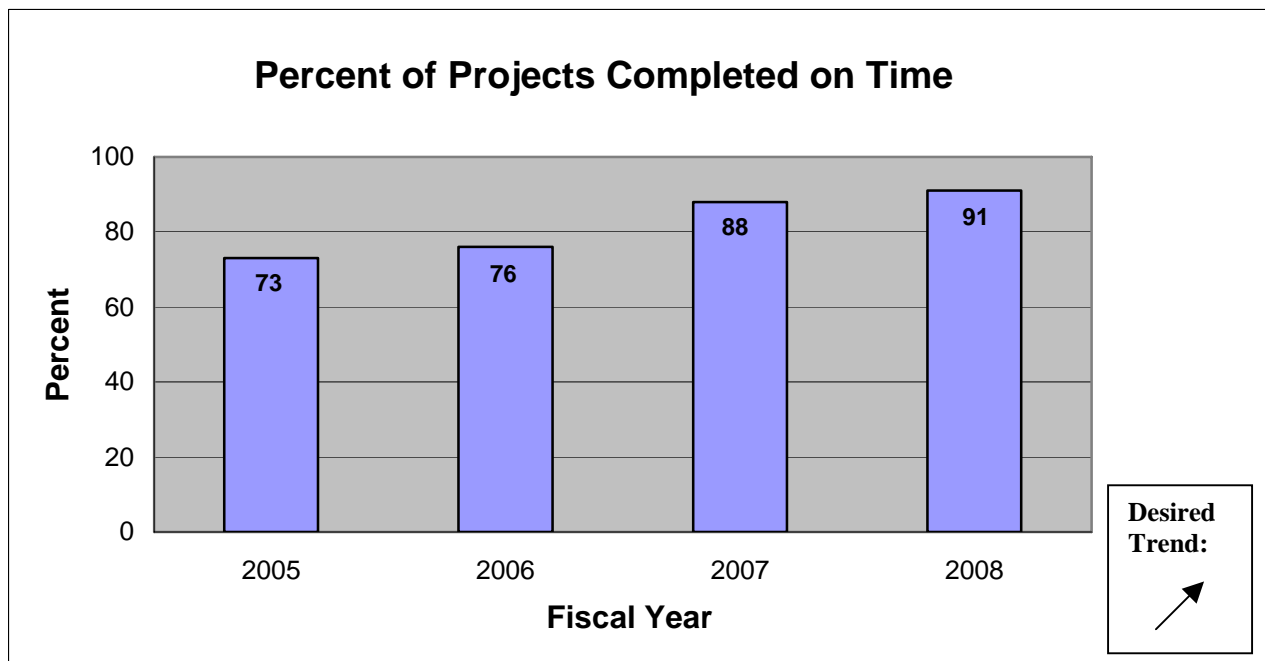
**Measurement and Data Collection:**

The project manager will establish project completion dates for each project. They are documented in MoDOT's SiteManager and STIP databases. It will be part of the Plans, Specifications & Estimates submittal. The actual completion date will be documented by the resident engineer and placed in MoDOT's project management system.

This is an annual measure updated each quarter.

**Improvement Status:**

The results indicate a three percent increase from fiscal year 2007 in the percent of projects completed on time. MoDOT has focused on reducing the number of days available for construction in order to reduce congestion and inconvenience to the traveling public, while stressing the importance of completing projects on time. To achieve timely completion of improvement projects, an emphasis has been placed on reviewing construction schedules and assessing liquidated damages.



## Fast Projects That Are of Great Value

### *Percent of change for finalized contracts*

**Results Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Dave Ahlvers, State Construction & Materials Engineer

**Purpose of the Measure:**

The measure tracks the percentage difference of total construction payouts to the original contract award amounts. This indicates how many changes are made on projects after they are awarded to the contractor.

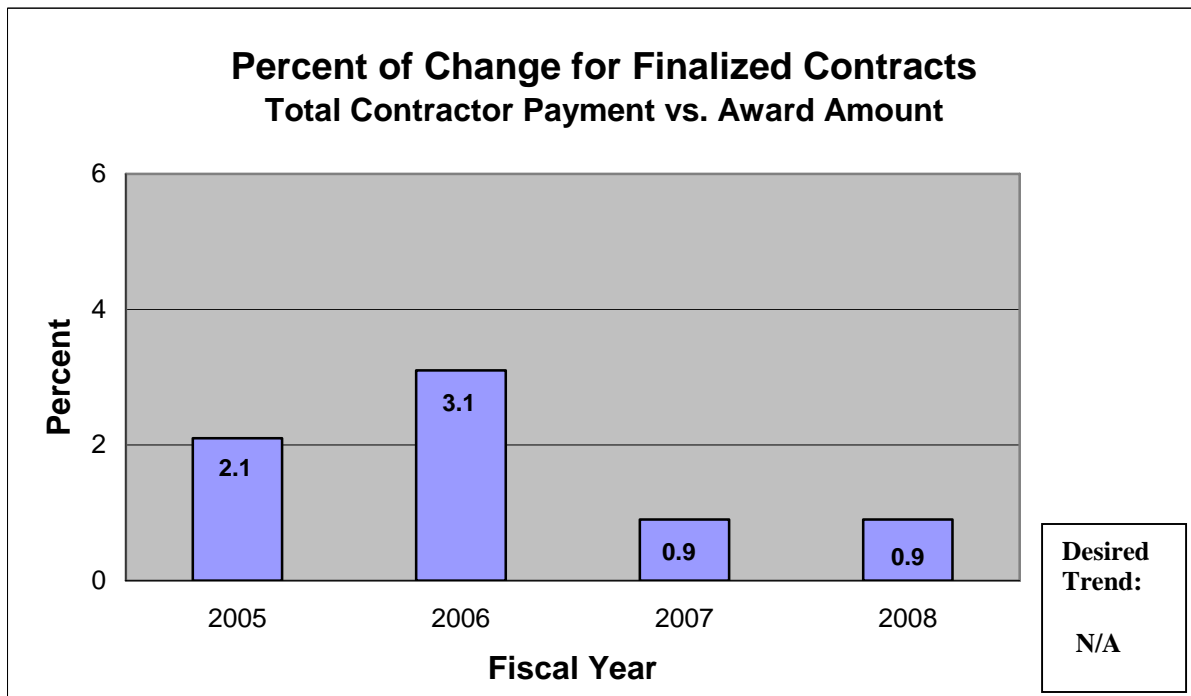
**Measurement and Data Collection:**

Contractor payments are generated through MoDOT's SiteManager database and processed in the financial management system for payment. Change orders document the underrun/overrun of the original contract.

This is an annual measure updated each quarter.

**Improvements Status:**

MoDOT's performance of 0.9 percent in fiscal year 2008 was well below the target of two percent. The overall improvement is a result of a strong emphasis placed on constructing projects within budget, the use of practical design and value engineering. By limiting overruns on contracts, MoDOT can deliver more projects, leading to an overall improvement of the entire highway system. The Performance Plus employee incentive program has placed additional emphasis on completion of projects within budget.



## Fast Projects That Are of Great Value

### *Average construction cost per day by contract type*

**Results Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Dave Ahlvers, State Construction & Materials Engineer

**Purpose of the Measure:**

This measure tracks the cost per day for project completion to determine the impact to the traveling public, enabling MoDOT to better manage project completion needs.

**Measurement and Data Collection:**

This information is gathered by extracting the actual time used for construction from the summary of days used in the SiteManager database and dividing it by the total costs of the project.

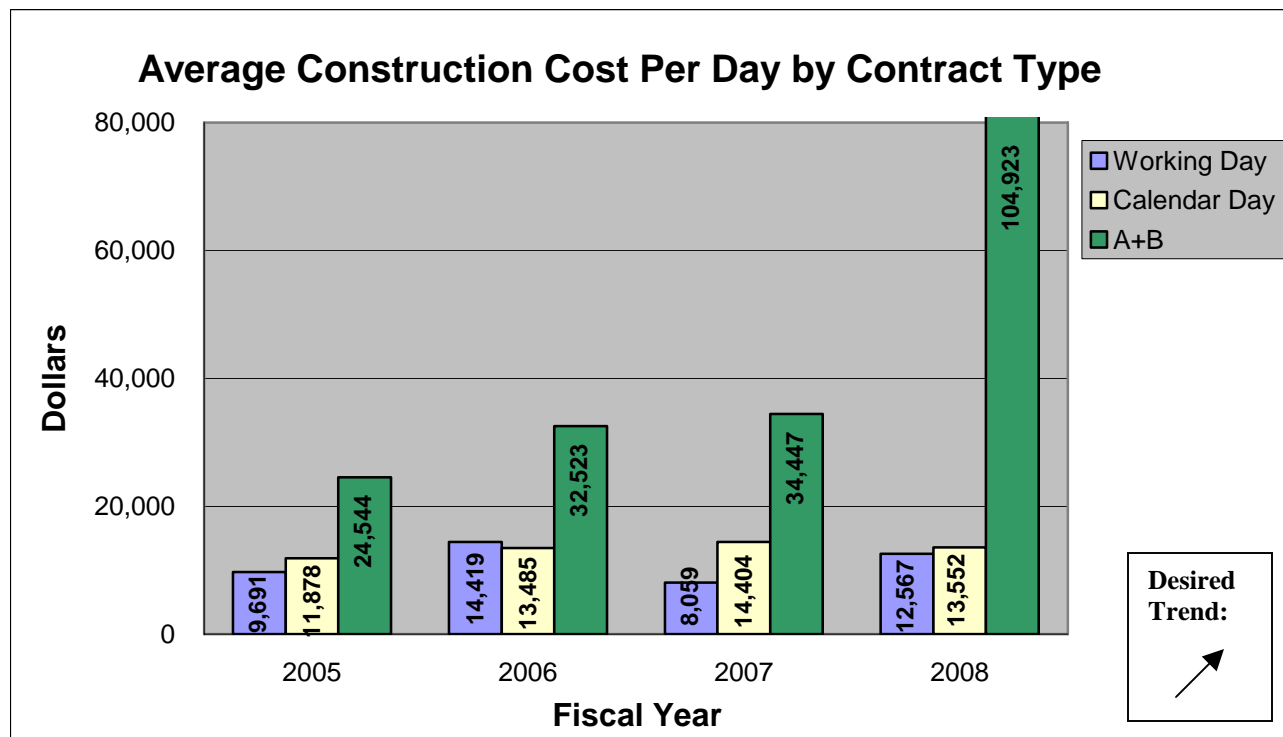
The measurement groups construction contracts into three categories:

- **WD** working day contracts
- **CD** calendar day contracts and;
- **A + B** or innovative contracts that provide incentive/disincentives to the contractor for early completion.

This is an annual measure updated each quarter.

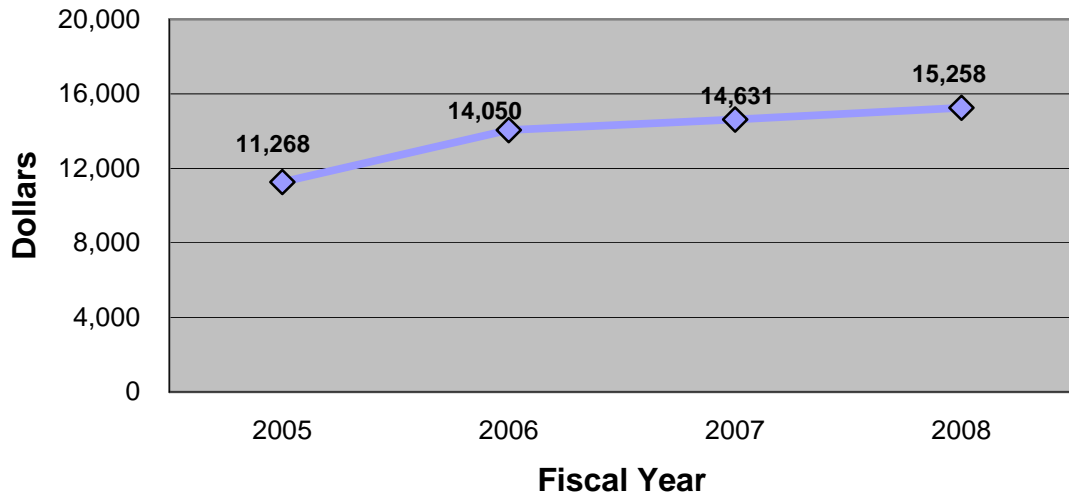
**Improvement Status:**

The greater use of A+B and calendar-day contracts resulted in a larger amount paid per calendar day in fiscal year 2008. MoDOT's strategy of utilizing innovative contracting techniques and Design-Build projects has resulted in faster contract completion and fewer delays to the traveling public. Contract types are reviewed to make a determination of the most effective use of resources for timely completion of projects.





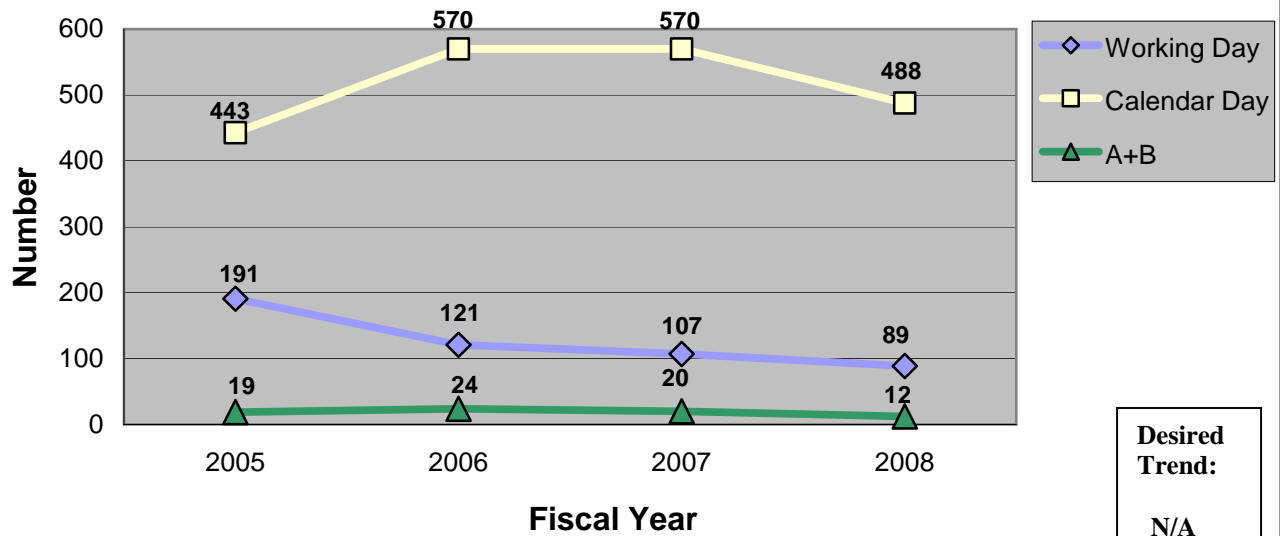
**Average Construction Cost Per Day by Contract Type**  
**All Contract Types**



**Desired  
Trend:**



**Average Construction Cost Per Day by Contract Type**  
**Number of Active Contracts**



**Desired  
Trend:**

N/A

## Fast Projects That Are of Great Value

### *Unit cost of construction expenditures*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Travis Koestner, Assistant State Construction and Materials Engineer

**Purpose of the Measure:**

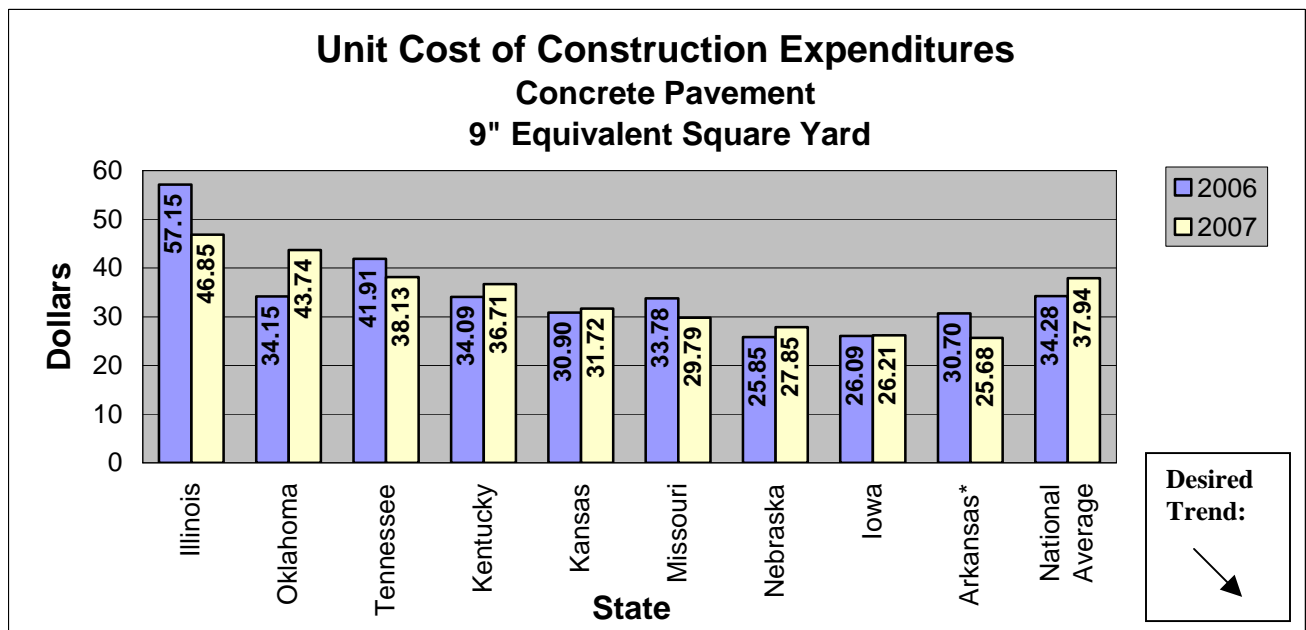
This measure tracks how MoDOT projects provide great value by comparing the cost of major items of work for MoDOT projects to other state DOTs. MoDOT customers should be able to gain an understanding of what it costs for a DOT to install an item of work. While value should not be defined as MoDOT prices per unit being the lowest as compared to other DOTs, prices can be compared keeping in mind that labor rates, material availability and general project conditions such as urban vs. rural will vary from state to state.

**Measurement and Data Collection:**

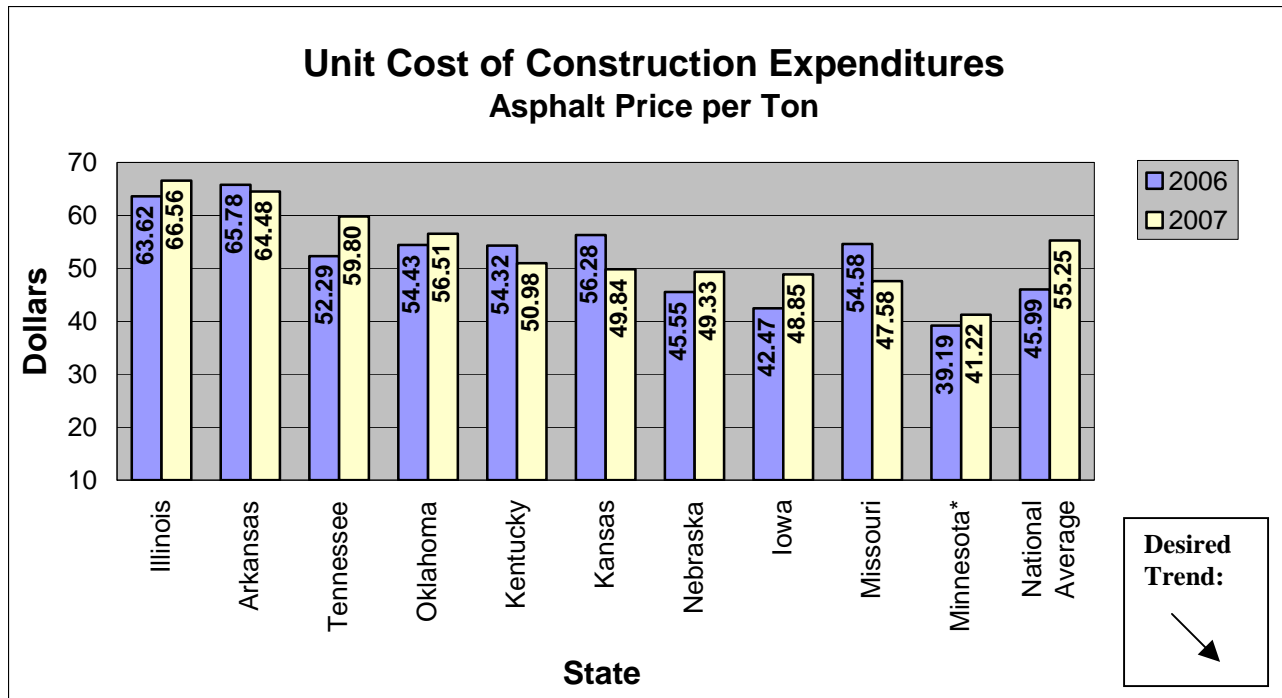
Value in this measure has simply been related back to dollars per unit of measure. MoDOT staff categorizes raw data from an outside vendor for the unit cost from other states. FHWA is the source for determining the “lowest in the country.” Currently FHWA is retooling its method of determining state price indexes. This is a success for DOTs since FHWA’s old method produced numerous pieces of erroneous data. Due to the data discrepancies the lowest in the country was selected from the best of what was available and the overall index of some of the surrounding states is not reported. This is an annual measure updated each January.

**Improvement Status:**

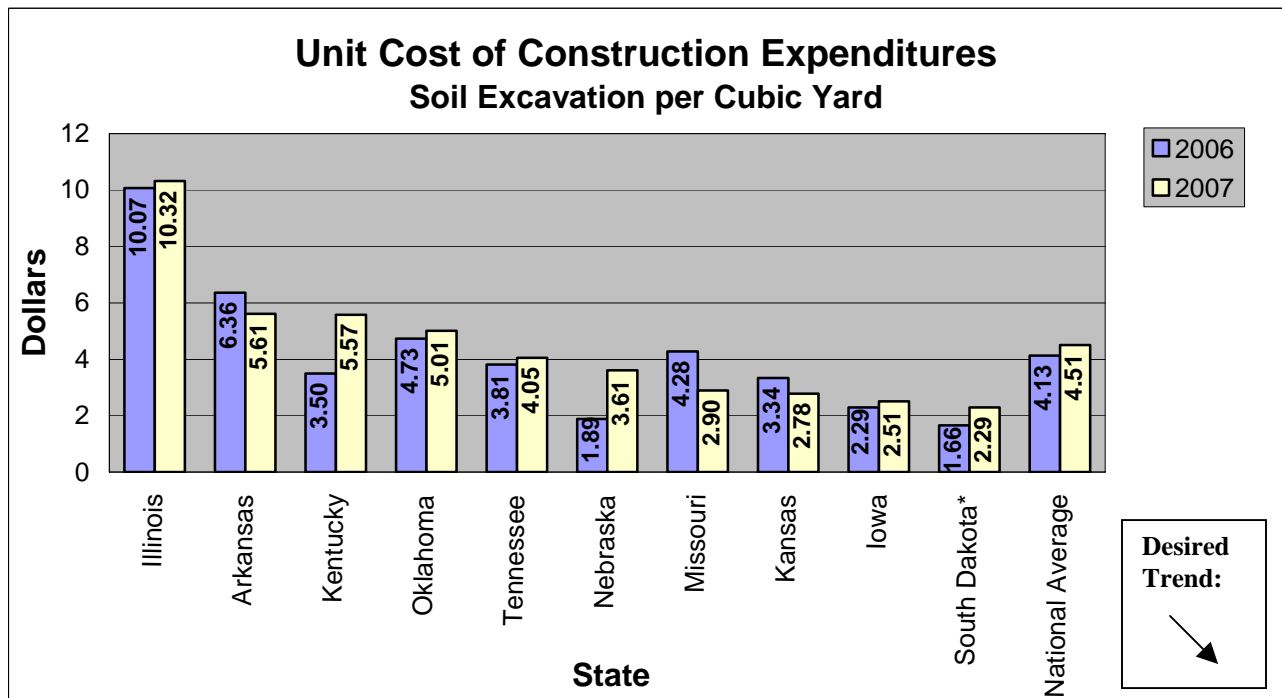
Excellent competition in the past year has enabled MoDOT to realize more than a 10 percent reduction in unit prices for paving and excavation – the largest percentage decrease in those areas among Missouri’s surrounding states. In the past year, MoDOT had an average of more than 4.2 bidders per proposal as compared to fewer than 3.5 bidders per proposal just a couple of years ago. Projects over \$20 million are receiving an average of over six bids per proposal which can be attributed to smaller programs in surrounding states and MoDOT’s efforts to “balance” the bid openings by spreading out the big jobs in different months. Balancing bid openings will continue as well as expansion of the use of alternate technical concepts that give bidders and designers more flexibility to deliver the best value for every dollar spent.



\* Lowest in the US in 2007



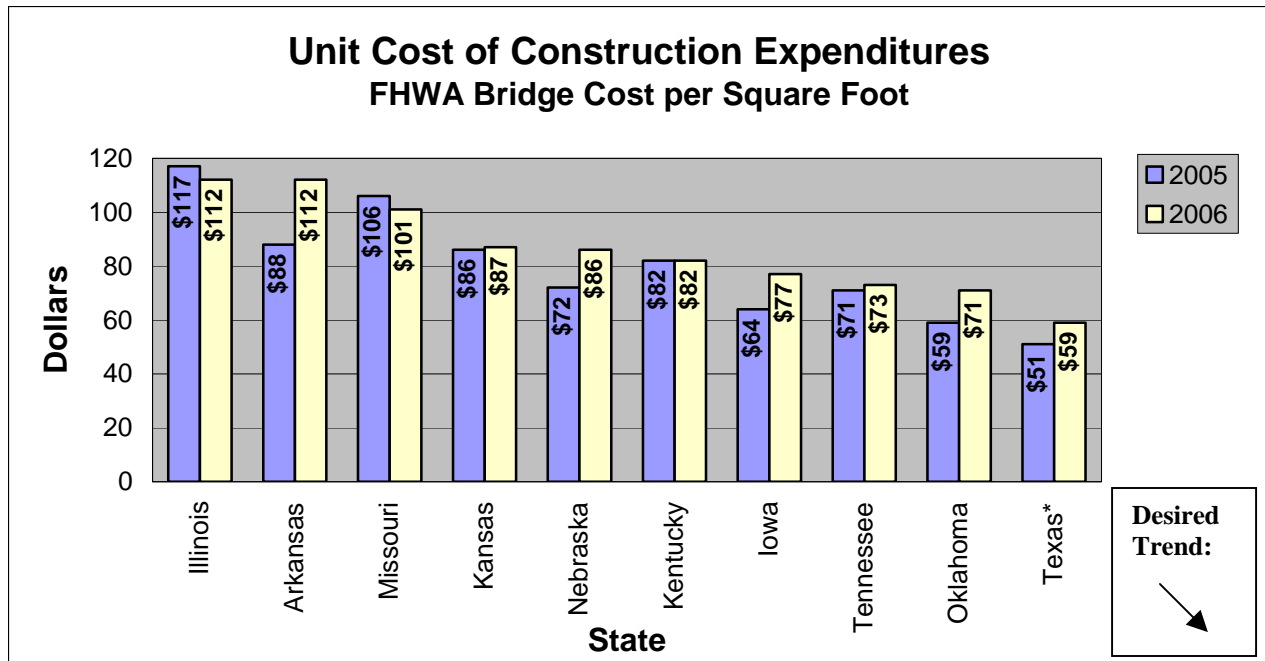
\* Lowest in the US



\* Lowest in the US

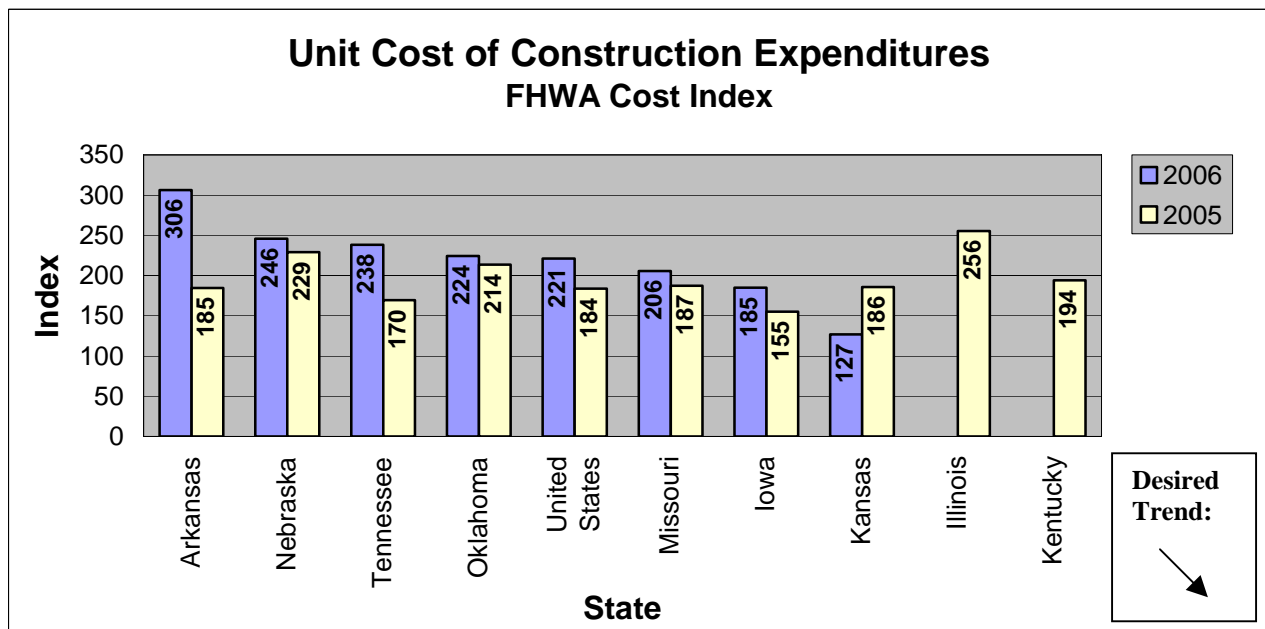
Footnote for the charts above:

Source Data for states other than Missouri from Oman Systems Bid Tabs Professional latest data available as of Jan. 1, 2008. Items include common excavation items paid for by the cubic yard. FHWA Data from FHWA "Price Trends for Federal-Aid Highway Construction" Fourth Quarter 2006. Missouri Data from MoDOT bid history.



\*Lowest in US

Source data from FHWA memo "Bridge Construction Unit Cost" dated January, 2008. FHWA does not publish an average U.S. cost per square foot for bridges.



Source: FHWA "Price Trends for Federal-Aid Highway Construction" Fourth Quarter 2006. Illinois and Kentucky did not report, Kansas index posted at 127 seems to have an error in the data. Information is still shown since it is the only information on a per state basis that is available.

## Fast Projects That Are of Great Value

### *Annual dollar amount saved by implementing value engineering*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Kathy Harvey, State Design Engineer

**Purpose of the Measure:**

This measure tracks the amount of money MoDOT saves by implementing value engineering proposals.

**Measurement and Data Collection:**

Value engineering (VE) has saved MoDOT over \$329 million since 1988. VE achieves savings at the design phase and at the construction phase of a project. VE utilizes a team approach to refine the purpose and need and then develop innovative and creative ideas, which result in project savings while optimizing project performance. The VE team is usually independent from the project core team and includes participants from various disciplines both from within and outside of MoDOT. VE studies are done on projects at all stages of development, from the concept stage to final design and during construction.

Traditionally, VE studies during the design phase of a project were a five-day formal event that required a tremendous amount of organization and facilitation. As a result, VE studies were only done on the significant few projects where large savings could be realized. In an effort to increase the number of VE studies being done and thus increase the potential for cost savings, the format of the study has been revised to be more flexible. VE studies now match the size and needs of the project, ranging from four hours to five days. This change has increased the number of VE studies being done during the design phase of the projects.

VE savings are reported annually to the Federal Highway Administration by each state and the national results are available for Federal Fiscal Year 2006. For design phase savings, Florida is the best in the nation showing \$414 million implemented. For construction phase savings, Virginia is the best in the nation showing \$6.71 million implemented. When compared to states surrounding Missouri, Kentucky reported \$61 million saved during design and Arkansas reported \$2.43 million saved during construction. Direct comparison to other states is challenging because of differences in construction program size and project development processes.

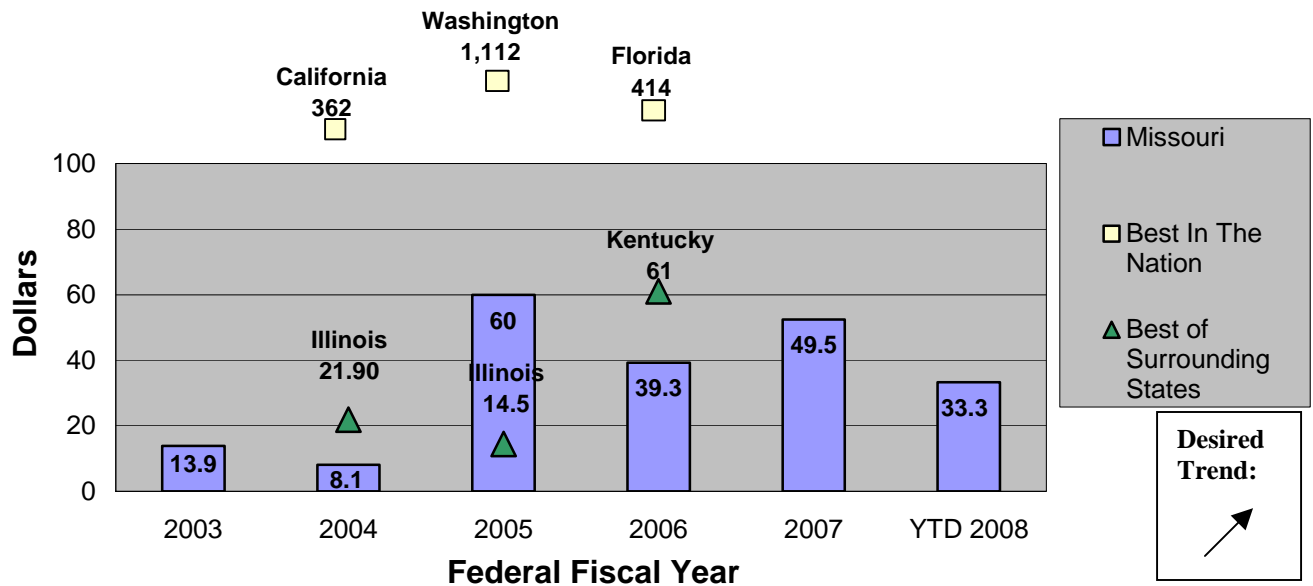
This is an annual measure using a federal fiscal year, running from October 1 to September 30. New updates are reported in the January Tracker edition, however the year-to-date total for the current fiscal year is included in each of the other editions.

**Improvement Status:**

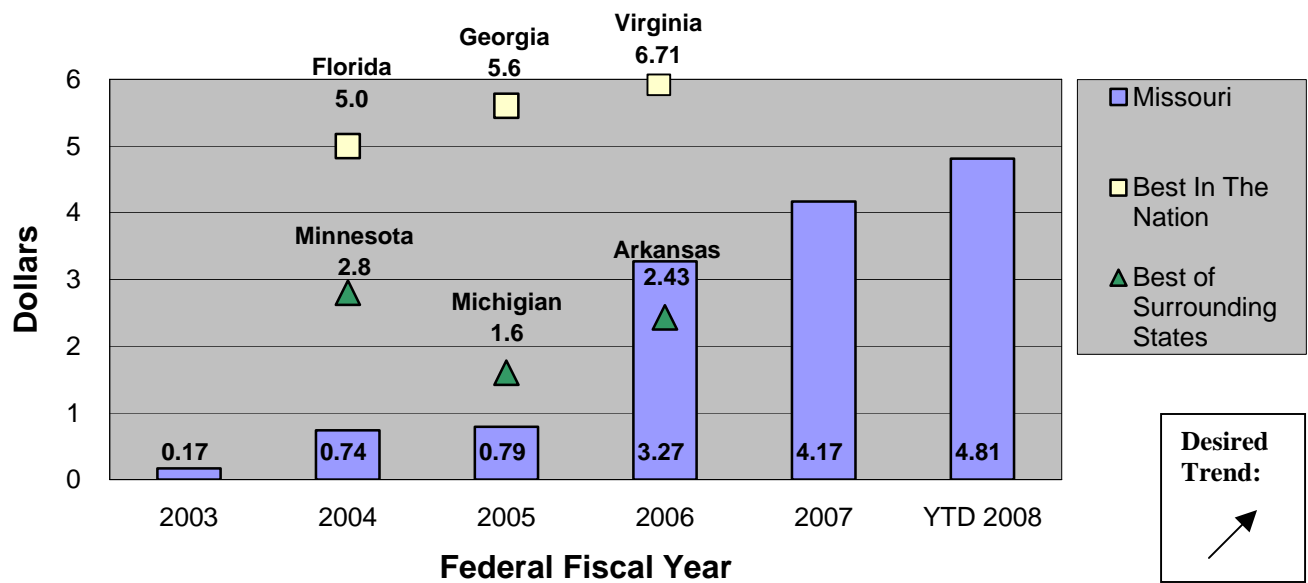
In 2007, MoDOT design savings from VE studies were \$49.5 million, a 25 percent increase from 2006. So far for 2008, design savings are \$33.3 million.

In 2007, MoDOT construction savings from VE studies were \$4.17 million: 63 out of 84 VE proposals submitted were approved. For the first three quarters federal fiscal year 2008, MoDOT construction savings from VE studies are \$4.81 million: 35 out of 44 VE proposals submitted were approved.

## Annual Dollar Amount Saved by Implementing Value Engineering Design Phase (in millions)



## Annual Dollar Amount Saved by Implementing Value Engineering Construction Phase (in millions)



## Fast Projects That Are of Great Value

### *Percent of customers who feel completed projects are the right transportation solutions*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Kathy Harvey, State Design Engineer

**Purpose of the Measure:**

This measure provides information regarding the public's perception of MoDOT's performance in providing the right transportation solutions.

**Measurement and Data Collection:**

Data for this measure is collected through an annual survey that is sent to users of projects that were completed and opened to traffic within the previous year. The goal is for the MoDOT districts to identify 30 projects – three per district – in three different categories (large – major route listed as or funded through major project dollars; medium – district-wide importance; and small – only local significance).

In fiscal year 2007 the Truman School of Public Affairs at the University of Missouri administered the survey of 30 projects, and in fiscal year 2008 Heartland Market Research coordinated the effort for 29 projects. In each case a sample of residents was drawn from zip code areas adjoining the roadway where the project was recently completed. The samples have included 400 addresses per project areas for a total of 12,000 surveys in fiscal year 2007 and 11,600 in fiscal year 2008. Nearly 2,900 surveys were returned in the initial survey and more than 2,300 were returned in fiscal year 2008.

In order to facilitate better comparisons of changes from year to year, the statistics used in the project assessment usually do not include “not sure” percentages. This eliminates a major source of random variability and allows a more accurate observation of change over time. In addition, this methodology is consistent with how MoDOT calculates similar Tracker measures. The fiscal year 2007 data has been recalculated with this methodology to enable readers to see changes from one year to another.

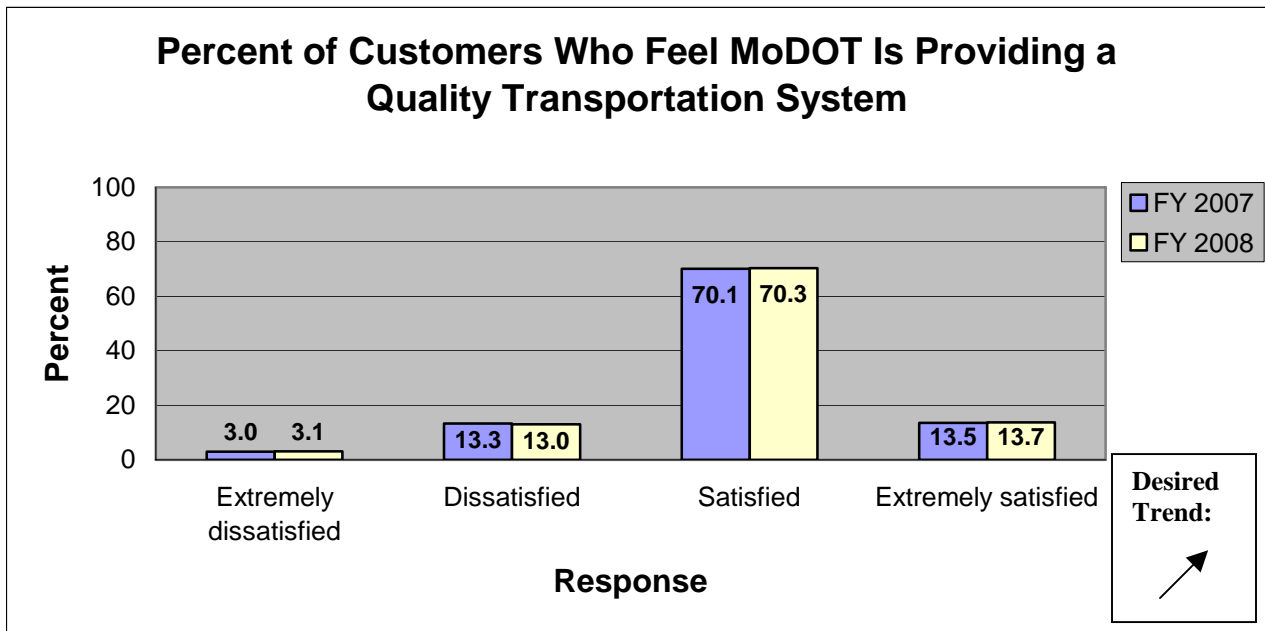
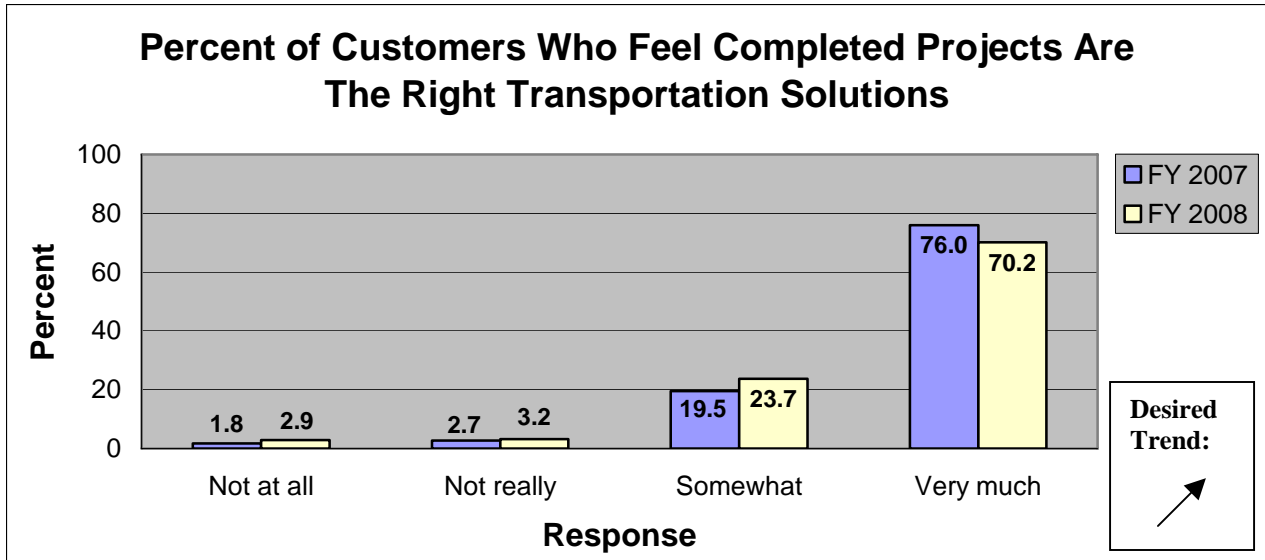
This measure is reported annually. Districts will continue to identify one project in each of the three categories to be surveyed, although it is recognized that it might not be possible for every district to have three projects that meet the criteria each year.

**Improvement Status:**

Project-specific questions were asked of MoDOT customers and each showed a high level of satisfaction with important goals such as safety, convenience, less congestion, handles traffic efficiently, easy to navigate, easy to understand, and well marked.

The results show that most Missourians are very satisfied with both the local project and with MoDOT's overall efforts. The majority of respondents thought that the project made the roadway safer (94.6 percent), more convenient (90.8 percent), less congested (81.1 percent), easier to drive (92.9 percent), better marked (89.9 percent) and was the right transportation solution (93.9 percent).

On a more general measure, 84 percent of the respondents stated that they were satisfied with MoDOT's efforts to provide a quality transportation system in Missouri. The survey also asks “What is the greatest transportation problem facing your community?” Over the last two years, Missourians have been very consistent about their top three transportation priorities. In both years, approximately 80 percent of respondents listed the poor conditions of roads and bridges, narrow roads, or congestion as the greatest transportation problems facing their community.





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# Environmentally Responsible

*Tangible Result Driver – Dave Nichols,  
Director of Program Delivery*

MoDOT takes great pride in being a good steward of the environment, both in the construction and operation of Missouri's transportation system and in the manner in which its employees complete their daily work. The department strives to protect, conserve, restore and enhance the environment while it plans, designs, builds, maintains and operates a complex transportation infrastructure.



## Environmentally Responsible

### *Percent of projects completed without environmental violation*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Kathy Harvey, State Design Engineer

**Purpose of the Measure:**

This measure tracks environmental violations. MoDOT projects must comply with several environmental laws and regulations. To be in compliance, MoDOT makes commitments throughout the project development process that must be carried forward during construction and maintenance. In addition, the various permits obtained for projects also contain specific requirements for compliance. MoDOT must also comply with the environmental laws and regulations as it conducts its daily work in all areas of the organization.

If a violation is noted, it can result in either a Letter of Warning (LOW) or a Notice of Violation (NOV) to MoDOT. Letters of Warning can also be received as simply that, a warning to MoDOT of a special circumstance to be aware of, or for a situation that needs to be monitored so that a violation does not occur. For that reason, LOWs never will be eliminated but should be kept to a minimum. However, it is unacceptable to the department to have an NOV.

**Measurement and Data Collection:**

Both LOWs and NOVs are written correspondence to MoDOT or MoDOT's contractors from regulatory agencies, which are tracked in a MoDOT database by location or project number, as appropriate. Where tracked by project, the project with violations received may span several years. The first chart is based on a calendar year of construction projects reported to be completed during that year and the number of violations received on those projects over the life of the project. The second chart is a report by calendar year of the LOWs and NOVs received by the department for any activity and the data is updated quarterly.

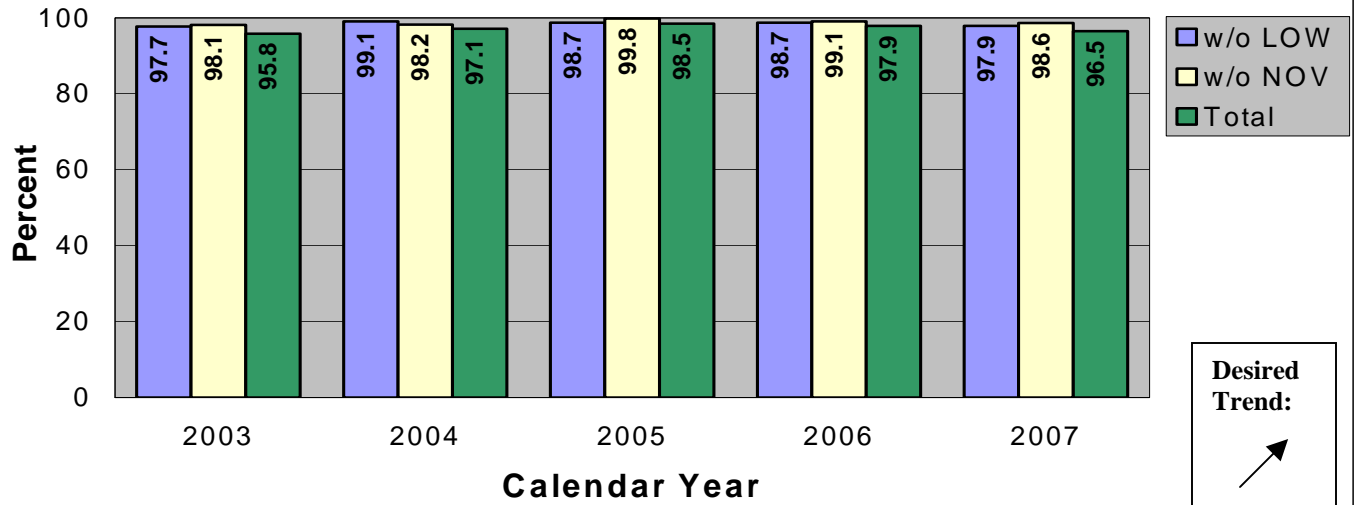
**Improvement Status:**

The percentage of projects completed without environmental violation shows a relatively level trend line for the past five years. However, the number of NOVs and LOWs for 2007 exceeds by a third the total for 2006 – six NOVs and nine LOWs.

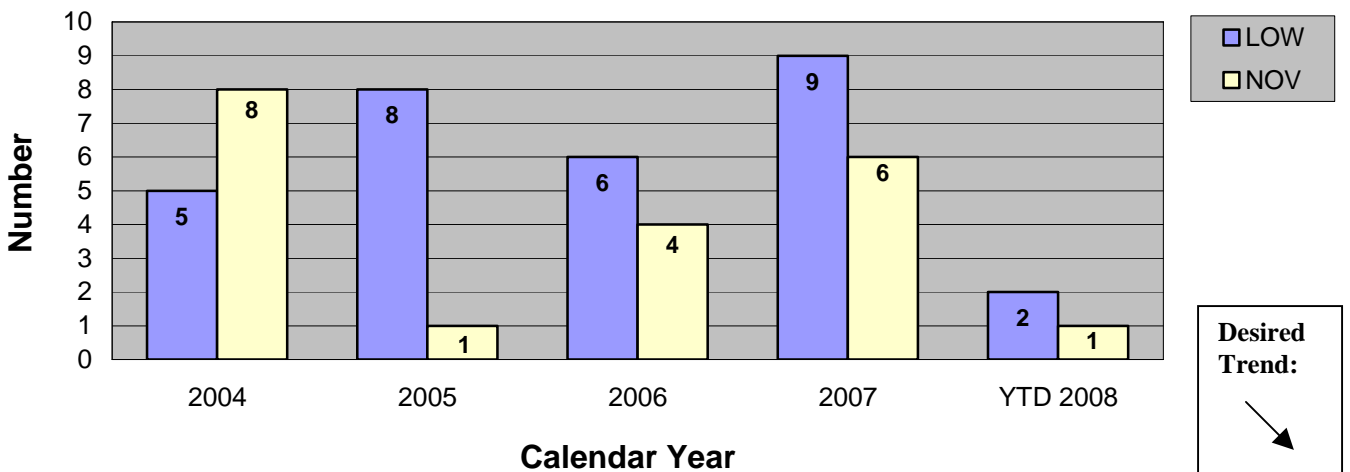
In the first quarter of 2008, MoDOT received one NOV for failure to notify the Department of Natural Resources 10 days prior to demolition at three locations.

In the second quarter of 2008, MoDOT received two LOWs. One was for failure to submit a discharge monitoring report for a rest area, while the other was for storm water runoff deficiencies at a maintenance facility.

### Percent of Projects Completed without Environmental Violation



### Number of LOWs & NOVs



Note: There is no benchmark data presented with this measure. MoDOT has a zero-tolerance policy towards NOVs, but recognizes LOWs will never be eliminated due to their nature. Therefore, regardless of what other states are doing, MoDOTs desired results are zero NOVs, because NOVs are usually violations of law and state statute.

## Environmentally Responsible

### *Number of projects MoDOT protects sensitive species or restores habitat*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Gayle Unruh, Environmental & Historic Preservation Manager

**Purpose of the Measure:**

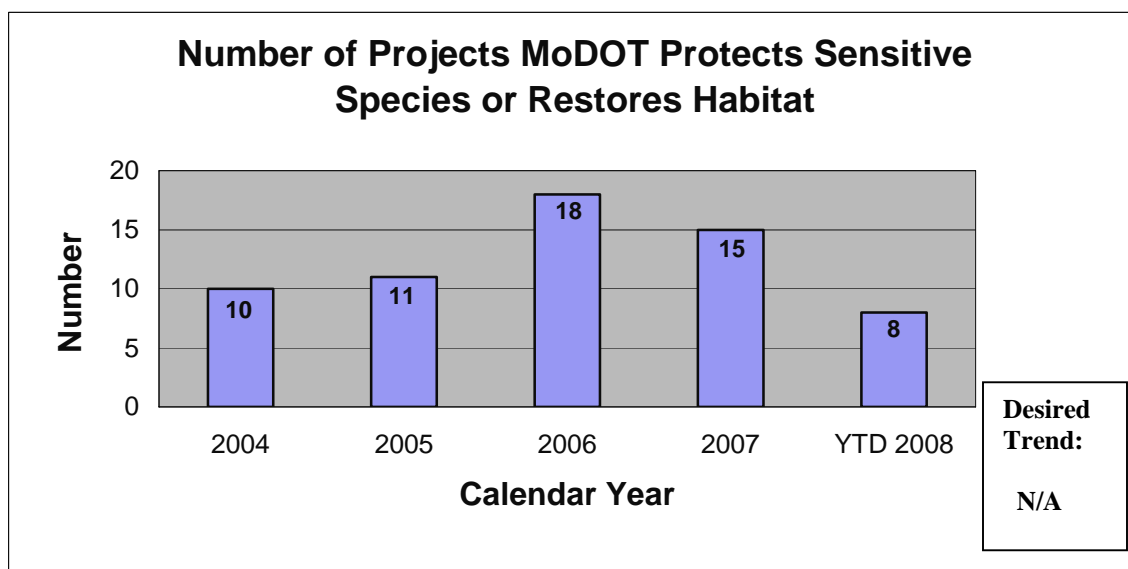
Missouri is home to many rare species of plants and animals, some of which are on the federal endangered species list. The Endangered Species Act of 1973 prohibits harm or harassment of these species. Avoiding or minimizing harm to these species and protecting or restoring their habitat is a fundamental obligation of this organization. Avoidance and/or protection are the first goals of MoDOT's efforts, but under circumstances where avoidance cannot be achieved, restoration of habitat is a minimum acceptable result.

**Measurement and Data Collection:**

On all MoDOT projects, the department investigates and informs the U.S. Fish and Wildlife Service (USFWS) of any activity in the vicinity of a known threatened or endangered species or critical habitat. Through consultation with USFWS MoDOT has the data to report on this measure. Because this measure focuses on projects that protect or restore sensitive habitats that could not initially be avoided, most MoDOT projects are not included in this data. This measure is tracked by calendar year with quarterly updates. Annual data are finalized and shown in the January Tracker. There is no desired trend with this measure. The number reported will fluctuate depending on the size of MoDOT's construction program each year, type of projects being constructed, location and the ability to make adjustments to avoid impacts on sensitive species or their habitat.

**Improvement Status:**

MoDOT has protected sensitive species or restored their habitat on eight projects in the first half of this calendar year. These species and habitats include the Indiana bat (two projects), Niangua Darter (one project), Pallid Sturgeon (one project), Ozark cavefish (three projects) and a mussel bed for an emergency slide repair project on the Meramec River. Route W in Jefferson County was sliding into the river because of spring flooding. U.S. Fish and Wildlife Service and Missouri Department of Conservation biologists worked with MoDOT to help expedite the slide repair by conducting same-day consultation. MoDOT committed to do follow-up research on the effects of the repair to the beds containing protected species of mussels, which are located immediately downstream of the slide.



## Environmentally Responsible

### *Ratio of acres of wetlands created compared to the number of acres of wetlands impacted*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Gayle Unruh, Environmental & Historic Preservation Manager

**Purpose of the Measure:**

Wetlands are a valuable resource in Missouri, having beneficial functions such as wildlife habitat, flood storage and water quality improvement. In addition to these benefits, it is required in the Clean Water Act that impacts to wetlands are avoided, minimized or that wetlands are recreated when a wetland is destroyed during a transportation project.

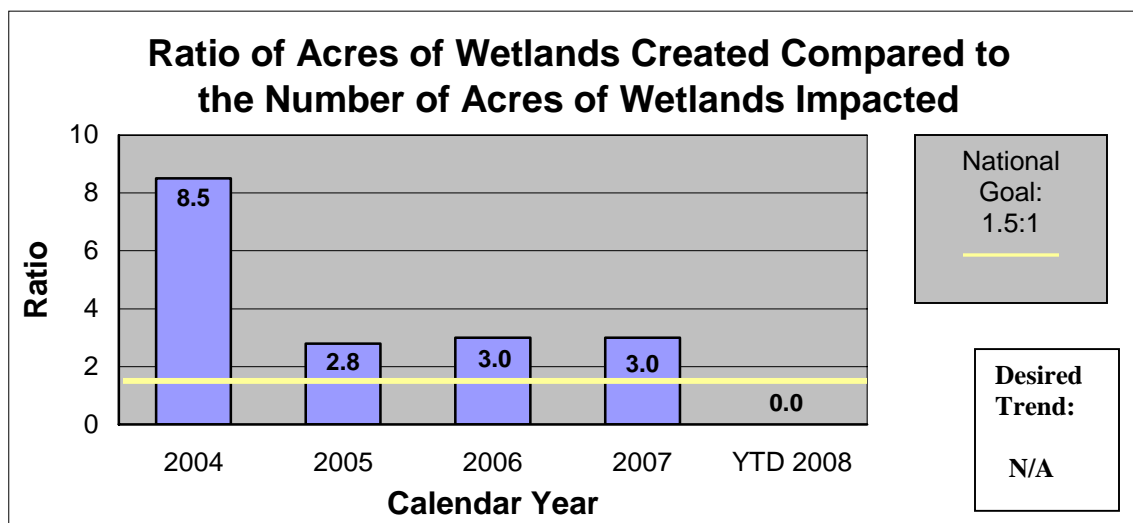
**Measurement and Data Collection:**

Data for this measure is calculated by comparing acres of project impacts taken from Clean Water Act permits to acres of wetland constructed, as shown in roadway design plans or by calculating the actual wetland areas recreated by MoDOT, or wetland mitigation purchased from a commercial wetland bank. Impacts may occur in a different year from the mitigation, so for the purposes of this measure, the timeframe for the reporting is when the mitigation construction is complete based on a calendar year. The national goal set by the FHWA for recreating wetland is to construct 1.5 acres of wetland for every 1.0 acre of wetland impacted. Recreating wetlands at this ratio helps to offset the lost beneficial functions during the time it takes for a wetland to develop. This measure helps ensure that MoDOT is doing its part to maintain wetlands in Missouri.

Since this measure is also tracked by FHWA for the nation, MoDOT contacted state DOTs that are successful at meeting the 1.5-to-1 ratio. Most of the states queried said that the biggest factor in meeting the ratio is in the use of wetland mitigation banks. They had greater control over achieving their target ratios and more ecologically successful wetland mitigation. MoDOT has a statewide umbrella wetland mitigation banking agreement. This measure is tracked by calendar year with quarterly updates.

**Improvement Status:**

MoDOT has not had any wetland mitigation impacts in the first half of 2008. MoDOT's Blue Springs Wetland Mitigation Banking Agreement for the Kansas City area has been signed by all agencies and construction begins this summer. With the construction of this wetland bank, MoDOT will have three wetland mitigation banks, one each in the Kansas City, Central and Southeast Districts. The Central District's stream mitigation bank proposal was featured as a best practice at the 2008 AASTHO Standing Committee for the Environment poster session in Monterey, Calif.



## Environmentally Responsible

### *Percent of Missouri's clean air days*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Eric Curtit, Long-Range Transportation Planning Coordinator

**Purpose of the Measure:**

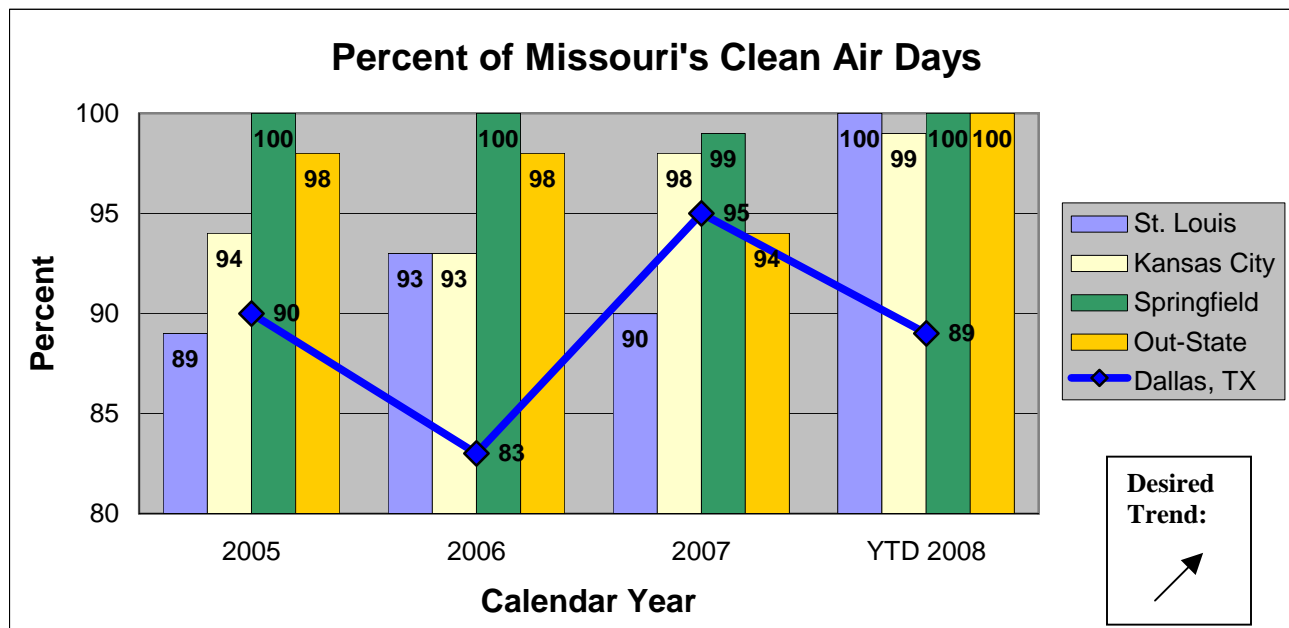
Vehicle emissions are a significant contributor to poor air quality. MoDOT makes every effort to build and operate roads in ways that improve air quality.

**Measurement and Data Collection:**

The Environmental Protection Agency (EPA) establishes air quality standards for the United States. The ground level ozone standard is used in this measure as a threshold for determining if areas of the state have clean air. EPA collects ozone readings in Kansas City, St. Louis, Springfield and the out-state areas during the annual monitoring period – April through October. The data contained in the table below reflects the available percentage of days, by area, that Missourians experienced clean air. MoDOT compares Missouri's ozone readings to Dallas, Texas, because of its similar pollutants and distance from other areas that affect its air quality.

**Improvement Status:**

A new, stricter standard has been established to better meet long-term air quality improvement goals. MoDOT is committed to improving the regions' air quality by managing congestion to reduce emissions, modifying daily operations, modifying employee action, providing information to the public, leading air quality improvements, providing alternative choices for commuters and promoting use of environmentally friendly fuels and vehicles. MoDOT continues to serve on the Air Quality Forum Committee in Kansas City and the Air Quality Advisory Committee in St. Louis. MoDOT is also serving on the new Springfield air quality committee.



## Environmentally Responsible

### *Number of gallons of fuel consumed*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Jeannie Wilson, Central Office General Services Manager

**Purpose of the Measure:**

This measure tracks the use of fuel within MoDOT. It shows MoDOT's contribution toward environmental responsibility and conservation of resources.

**Measurement and Data Collection:**

This measure is intended to focus on the total fuel consumed and how wise choices can impact fuel economy. Data is collected based on the number of gallons of fuel consumed by unit recorded in the statewide financial system.

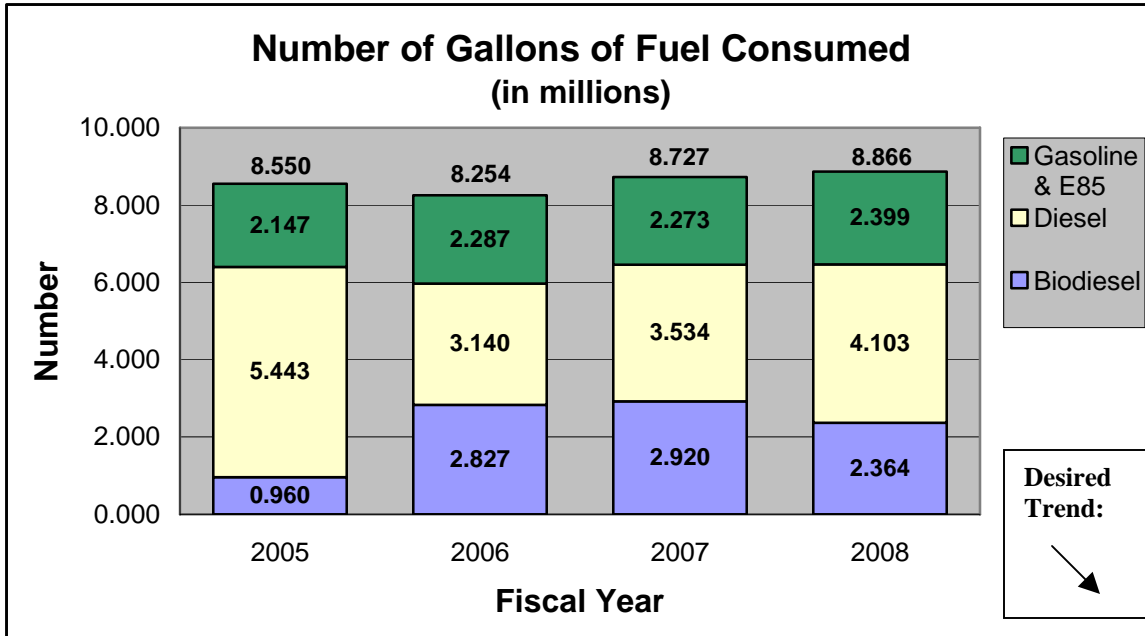
As of January 1, 2008, MoDOT must meet the following state guidelines: 70 percent of the light duty vehicles ( $\leq 8,500$  GVW) purchased must be alternative fuel capable; 30 percent of the fuel that our light duty alternative fuel fleet uses must be alternative fuel; 75 percent of all diesel fuel burned (off road and on road) must be a minimum of B20 blend (20 percent biodiesel and 80 percent diesel) or higher. MoDOT exceeds the guideline for purchasing equipment. MoDOT does not currently meet the 75 percent B20 requirement due to the seasonal use of B20.

**Improvement Status:**

The fuel consumed through fiscal year 2008 increased by 139,000 gallons or 1.6 percent compared to the amount of fuel consumed through fiscal year 2007. Fiscal years 2005 and 2006 were mild winters and this is reflected in the amount of fuel used. However, this was not the case for fiscal years 2007 and 2008. In addition to the frequent winter storms in fiscal year 2008, MoDOT's field crews also battled earthquakes, floods and tornadoes.

Through third quarter of fiscal year 2008, over half of the overall increase in consumption was due to diesel. In the fourth quarter, however, over 91 percent of the total fuel increase is attributed to an increase in E85 and unleaded. This change is in large part the result of the energy efficiency efforts being made statewide. For example, MoDOT has focused on using the right piece of fleet equipment for the job. The light duty truck fleet mileage has increased 5.8 percent from fiscal year 2007 to fiscal year 2008. Fuel consumption for this fleet class has increased by 10.9 percent for the same period.

For fiscal year 2006, 48.9 percent of the diesel fuel MoDOT purchased was B20 while in fiscal year 2007, 45.8 percent of the diesel fuel purchased was B20. In fiscal year 2008, 37.0 percent of the diesel fuel purchased was B20. The drop in fiscal years 2007 and 2008 was due to the increased use of diesel during the winter months because of performance issues in cold weather. It can also be attributed to the use of winter blend beginning earlier in the year and continuing longer into the spring.





## Environmentally Responsible

### *Number of historic resources avoided or protected as compared to those mitigated*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Bob Reeder, Historic Preservation Coordinator

**Purpose of the Measure:**

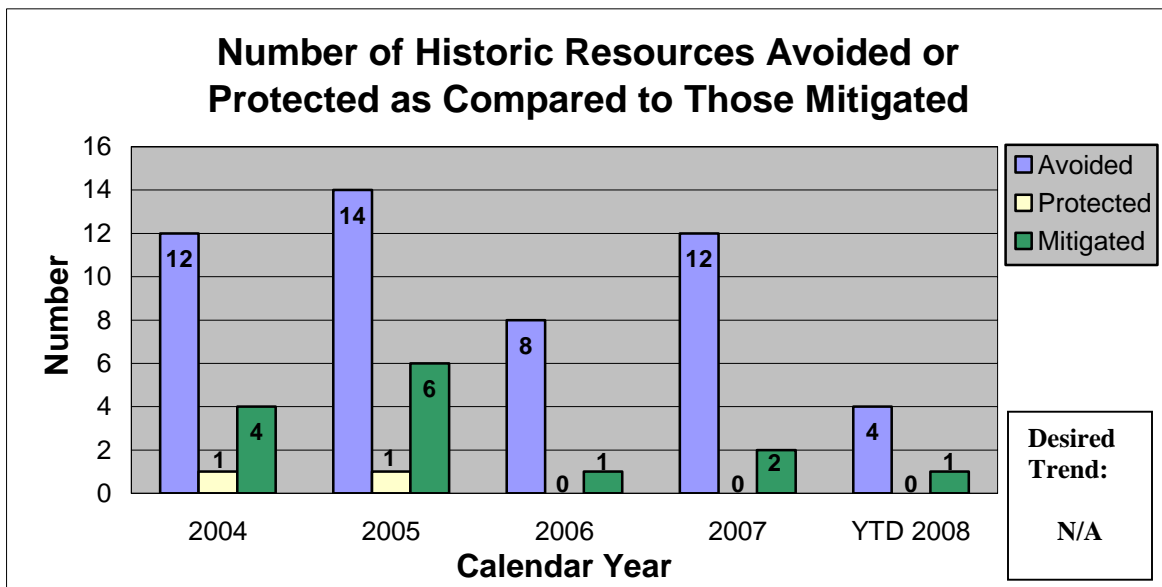
Federal historic preservation laws relating to federally funded projects, gaining public and agency support for particular projects, and general environmental stewardship require MoDOT to avoid, minimize or mitigate project impacts to historic buildings and bridges whenever feasible. Compiling information about project impacts to important cultural resources provides a measure of MoDOT's success at avoiding, protecting or mitigating project impacts to important cultural resources.

**Measurement and Data Collection:**

Data collection begins at the approved conceptual plans stage for projects. As project design plans and right of way plans are prepared by the district, department staff track the number of historic resources in project footprints and the number of resources that can be avoided or protected by revising the design of a project versus the number of resources MoDOT can not avoid and must be mitigated. The data includes only historic resources identified as potentially affected by projects after the conceptual plan stage. The data does not include historic resources avoided during early project planning or those avoided during consideration of different alignments during National Environmental Policy Act studies. This measure has no overall desired trend. For any year, data for the measure will vary due to the number of projects in the MoDOT program and the specific nature of those projects. This measure is tracked by calendar year with quarterly updates.

**Improvement Status:**

MoDOT avoided impacts to all but one historic resource during the first two quarters of 2008. The significant historic resource that could not be avoided was Sedalia's Wheel Inn Drive-In restaurant. Impacts to this property from improvements to the intersection of Routes 50 and 63 were mitigated through the preparation of detailed photographic and historical documentation. While there is no desired trend to this measure, the overall effectiveness of MoDOT's historic preservation efforts is reflected by all of MoDOT's activities during the first two quarters of 2008 resulting in the required mitigation of project impacts to only one historic resource.



## Environmentally Responsible

### *Number of tons of recycled/waste materials used in construction projects*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Dave Ahlvers, State Construction and Materials Engineer

**Purpose of the Measure:**

This measure tracks MoDOT's efforts to be environmentally conscious through the use of recycled/waste material when applicable.

**Measurement and Data Collection:**

The number of tons of recycled/waste material used in construction projects is measured through MoDOT's construction management database, which tracks material incorporated into projects. Data is collected on an annual basis due to the seasonal nature of the construction. The annual total for 2007 is finalized in each April edition.

**Improvement Status:**

The Interstate 64 project accounted for 120,000 tons of reclaimed concrete so far this year. Concrete from demolition of bridges and pavement have been placed in lieu of rock fill under the new pavement. Efforts continue to recycle all waste material from the project.

Approximately 64,000 tons of hot mix asphalt (HMA) was recycled in place. In-place recycling all but eliminates the need for new material and hauling to and from the project. Additional hot in-place and cold in-place recycling projects are either under construction or under design.

About 60 percent of the HMA mixtures received in the Central Laboratory this year have contained reclaimed asphalt pavement (RAP) and/or reclaimed asphalt shingles (RAS). There are currently seven RAS processors and eight contractors adding shingles to the mixtures. The primary limiting factor for RAP and RAS appears to be local availability. A national RAS pooled fund study with Missouri as the lead state has been advertised that may lead to increased amounts of RAS as well as fewer restrictions on the type of mixture to which it may be used.



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# Efficient Movement of Goods

*Tangible Result Driver – Brian Weiler,  
Multimodal Operations Director*

Missouri's location in the nation's center makes it a major cross-roads in the movement of goods. Transportation infrastructure must be up to the task so that as the flow of freight becomes more efficient, businesses and communities share the economic benefits.



## Efficient Movement of Goods

### *Freight tonnage by mode*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Eric Curtit, Long-Range Transportation Planning Coordinator

**Purpose of the Measure:**

This measure tracks trends and indicates diversification of freight movement on Missouri's transportation system.

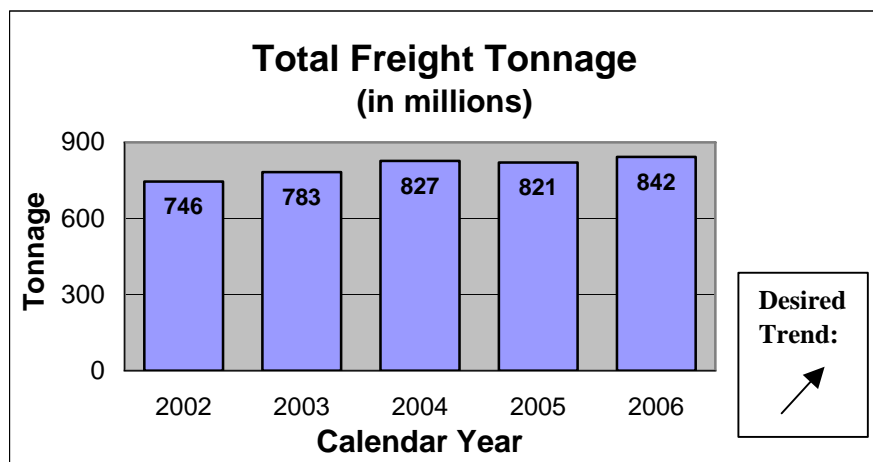
**Measurement and Data Collection:**

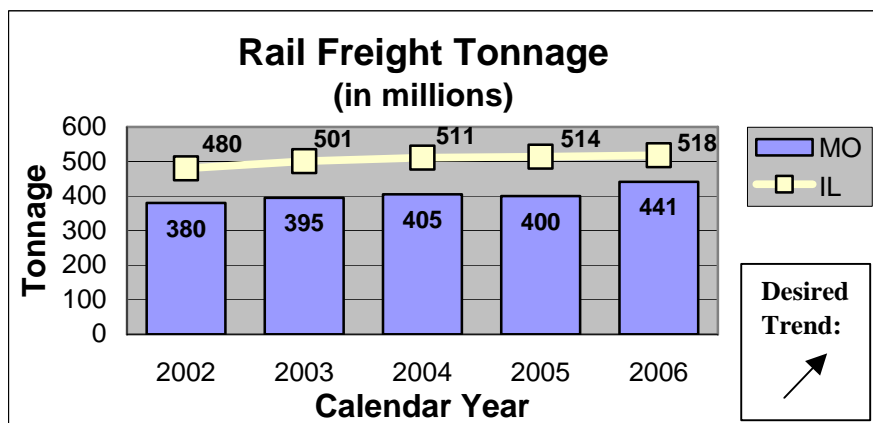
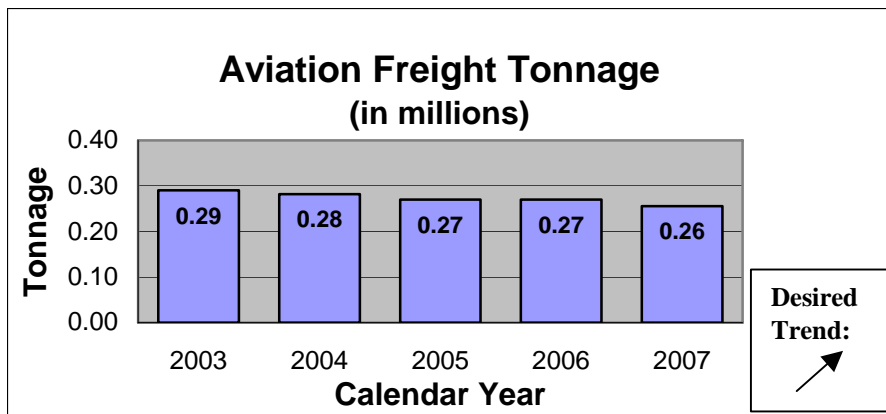
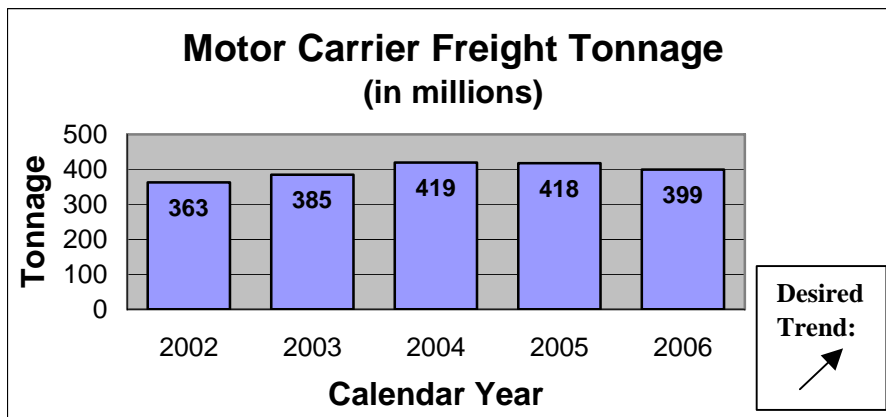
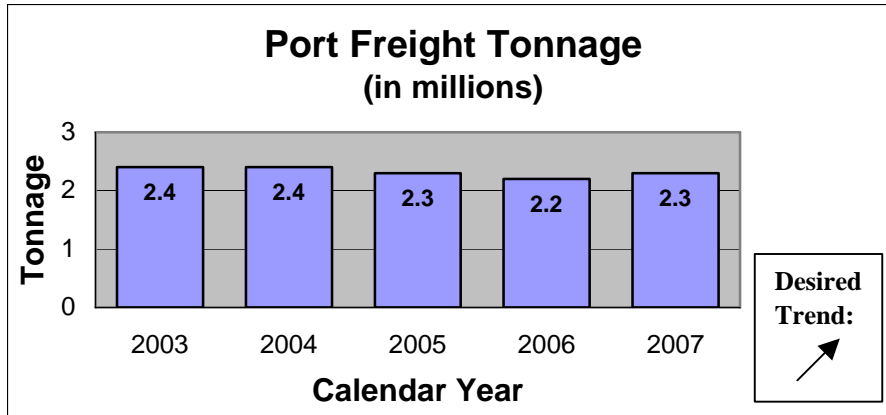
This is an annual measure. However, individual charts are updated with new annual data as it is obtained from external sources. Port tonnage is reported to MoDOT from public ports. Air cargo data is collected via mail survey to commercial airports with known cargo activity. Rail tonnage is obtained from the Association of American Railroads. MoDOT calculates motor carrier freight movement using commercial vehicle miles traveled, trip length per shipment and average truck cargo weight.

**Improvement Status:**

Total freight tonnage for all modes exceeds 800 million tons. Port tonnage has remained relatively steady since 2003 despite low flows on the Missouri River. Long-term growth of river transportation is hampered by an inadequate lock and dam system on the Upper-Mississippi River above St. Louis. Motor carrier data may not directly reflect exact industry tonnage amounts and should only be used to indicate general industry trends.

Aviation tonnage continues to be impacted by a downturn in the aviation industry from 9/11 and the resulting financial impacts to airlines, which carry a significant portion of air cargo. Commercial airports are under the jurisdiction of the Federal Aviation Administration. However, MoDOT's Aviation Advisory Committee helps identify ways to better support the commercial aviation industry. Rail freight tonnage increased 10 percent in 2006, likely due to increased coal shipments. Railroads continue to struggle with system capacity and labor shortage issues. MoDOT funded a capacity analysis through the University of Missouri that identified specific rail infrastructure projects that could improve both freight flow and passenger rail reliability on Union Pacific's mainline between St. Louis and Kansas City.





## Efficient Movement of Goods

### *Percent of trucks using advanced technology at Missouri weigh stations*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Barbara Hague, Special Projects Coordinator

**Purpose of the Measure:**

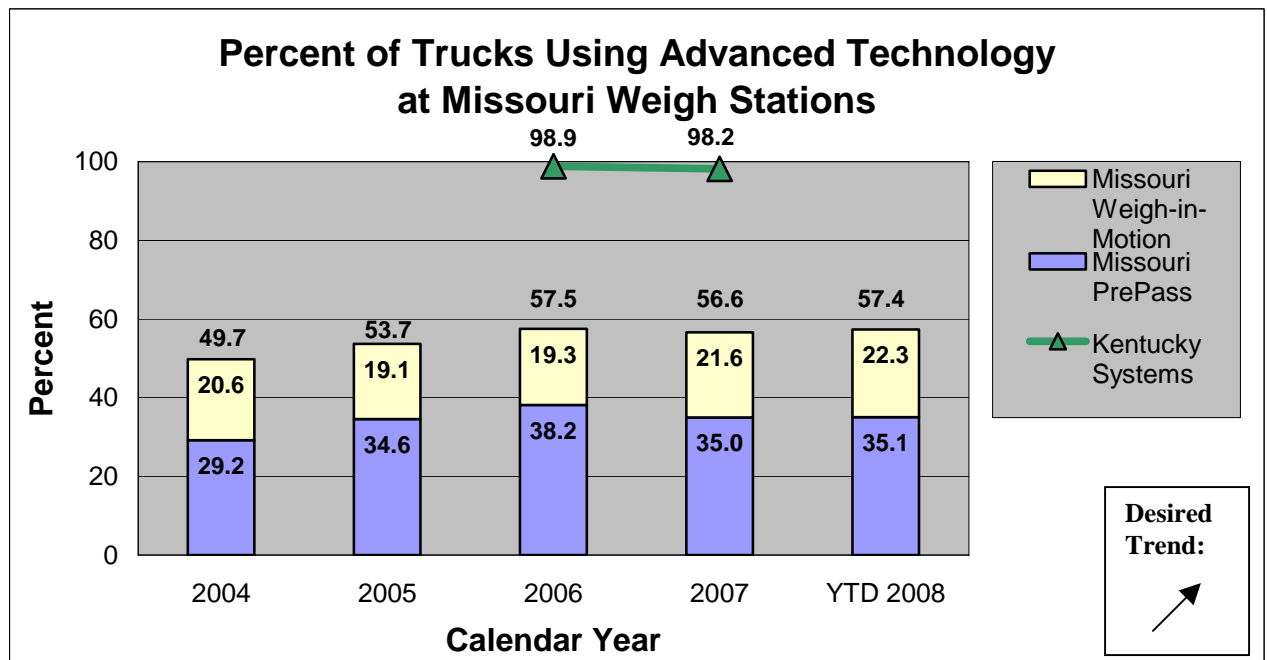
This measure indicates motor carriers' acceptance of tools designed to improve the flow of freight traffic on Missouri highways.

**Measurement and Data Collection:**

For this quarterly measure, data is collected by HELP, Inc.'s PrePass system computers which scan transponder-equipped vehicles as they approach 19 Missouri weigh stations. Pavement sensors check the vehicle's weight while computers review MoDOT's records to determine the carrier's compliance with safety, insurance and other state and federal regulations. Drivers are notified to stop or are allowed to continue without delay. Carriers that comply with state and federal regulations save time and money. The Missouri State Highway Patrol provides a quarterly measure of the number of trucks that use Missouri's weigh-in-motion scales located at Mayview and Foristell. These scales measure weight as trucks pass over them at 40 mph. Using ramp scales rather than verifying weight on fixed scales that require a full stop saves both time and money. The benchmark state of Kentucky uses Ramp Sorter weigh-in-motion scales as its primary weighing tool and participates in Norpass, a mainline verification system. Kentucky's mainline verification numbers are much lower than Missouri's because their use of fixed scales is limited.

**Improvement Status:**

The use of advanced technology continues to be flat due to slow growth in the number of vehicles enrolled in the PrePass system since the later part of 2007. In the last two months, the number has declined to the total number of vehicles enrolled as of January of this year. Weigh-in-motion scales and sensors are scheduled for replacement on Interstate 44 at Joplin and Interstate 55 at Charleston.



## Efficient Movement of Goods

### *Interstate motor carrier mileage*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joy Prenger, Accounting Services Supervisor

**Purpose of the Measure:**

This measure reports the fluctuations of motor carrier freight movement in Missouri. MoDOT uses the information to monitor freight movement trends.

**Measurement and Data Collection:**

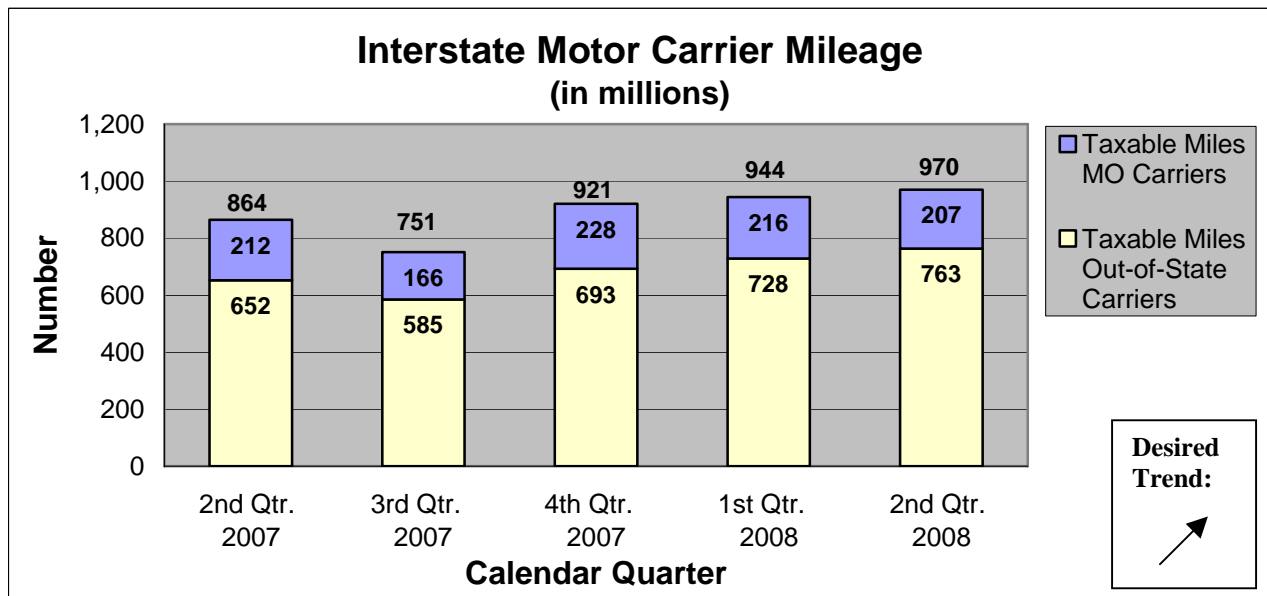
Data is collected quarterly. International Fuel Tax Agreement tax returns filed by member states and provinces and monthly reports of mileage data by the members are used to monitor the number of taxable miles traveled in Missouri by all motor carriers.

**Improvement Status:**

Total interstate miles traveled in Missouri increased 2.8 percent from last quarter.

During the second quarter of 2008, motor carriers traveled 12.3 percent more miles in Missouri than in the second quarter of 2007. Compared to the same time last year, out-of-state carriers traveled 17 percent more miles here, and Missouri-based companies drove 2.4 percent fewer miles in their home state.

Trucking industry news media report that the national truck tonnage index decreased 4.3 percent from March through May. For 2007, it is reported that industry revenue increased 7.3 percent. That increase includes fuel surcharges embedded in their pricing in an effort to keep up with the increasing cost of fuel.





## Efficient Movement of Goods

### *Percent of satisfied motor carriers*

**Results Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** DeAnne Rickabaugh, Outreach Coordinator

**Purpose of the Measure:**

This measure tracks MoDOT's progress toward the goal of expeditiously meeting the needs of the motor carrier industry and facilitating freight movement. MoDOT's Motor Carrier Services team uses the data to identify opportunities to improve customer satisfaction.

**Measurement and Data Collection:**

MCS personnel, working with Heartland Market Research, LLC, revised a survey to collect customer satisfaction data. A single survey addresses all five MCS program divisions, International Registration Plan, International Fuel Tax Agreement, Overdimension/Overweight Permitting, Safety and Compliance and Operating Authority. Survey respondents identified the services they use when doing business with MCS, then indicated their level of satisfaction with 12 customer service factors such as "timely response," "friendly," "respectful," and "outcome." They also gave an "overall satisfaction" score. Customers used a four-point scale: 4 = Very Satisfied, 3 = Satisfied, 2 = Dissatisfied and 1 = Very Dissatisfied.

H. J. Heinz Company is the benchmark for this measure that also mirrors measure 5a, Percent of Overall Customer Satisfaction. The American Customer Satisfaction Index reports that Heinz has the highest customer satisfaction rate of 200 companies and government agencies it scores – 90 percent – which is an increase compared to last year's score of 87 percent.

**Improvement Status:**

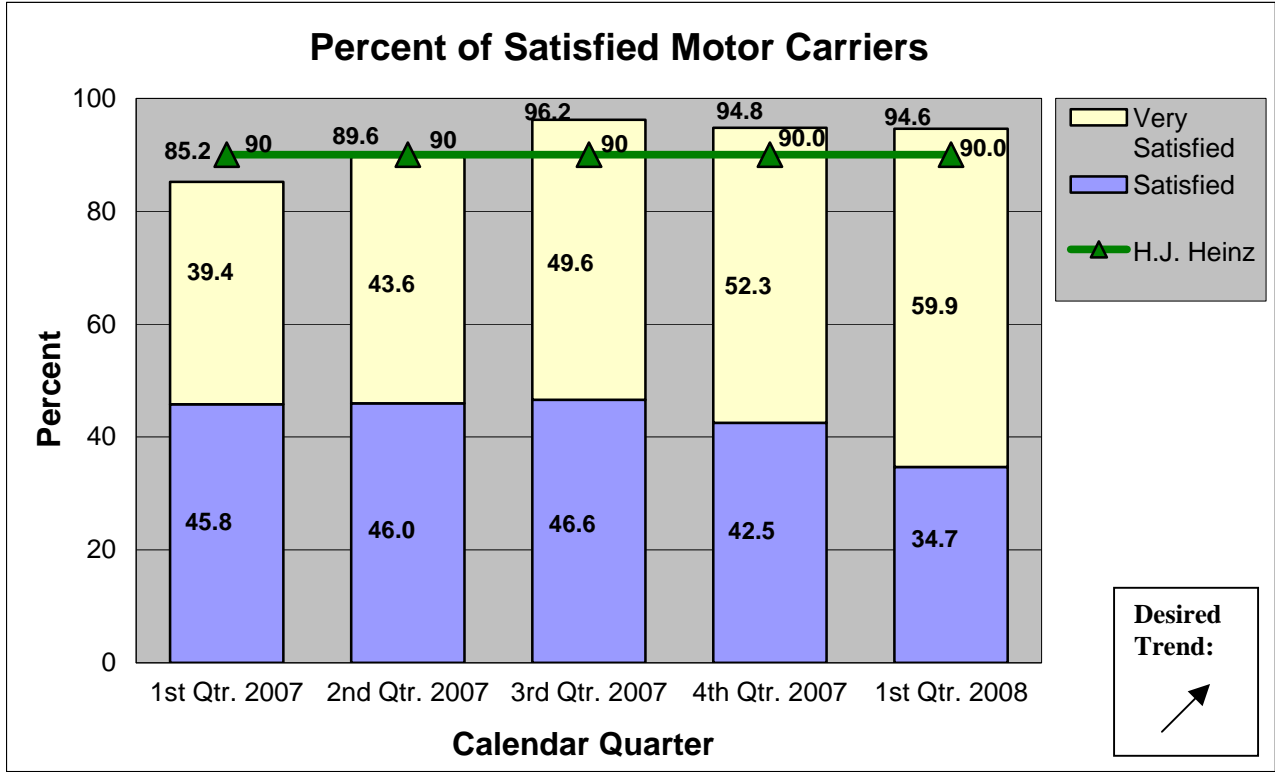
The latest survey reports MCS' high customer satisfaction ratings continue with 94.6 percent satisfaction in the first quarter of 2008. This is only a slight change since the last quarter, but the ratio of people who said they were "very satisfied" with the service they received from MCS rose to 59.9 percent – a record level. The overall score is almost 10 percent higher than the same time last year

This quarter's data stems from customers' opinions of service received during January, February and March, 2008.

To retain and improve customer satisfaction, MCS:

- Began accepting payments by eCheck – a service that draws funds directly from a carrier's checking account. The service fee, paid to a processing company, of 60 cents – is much less than a typical credit/debit card fee which is based on the amount of the transaction.
- Changed its telephone hold music to a service that provides a 20-minute loop of contemporary songs. MCS can change the type of music played overnight. Customer response is overwhelmingly positive.
- Instigated revival of the Mississippi Valley Conference Subcommittee on Highway Transport. The group improves communication among OD/OW professionals in Midwestern states and works to standardize OD/OW rules and law in the region, resulting in smoother transitions for multi-state OD/OW haulers.





## Efficient Movement of Goods

### *Customer satisfaction with timeliness of Motor Carrier Services' response*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** DeAnne Rickabaugh, Outreach Coordinator

**Purpose of the Measure:**

This measure tracks motor carriers' satisfaction with MoDOT Motor Carrier Services' speed of response.

**Measurement and Data Collection:**

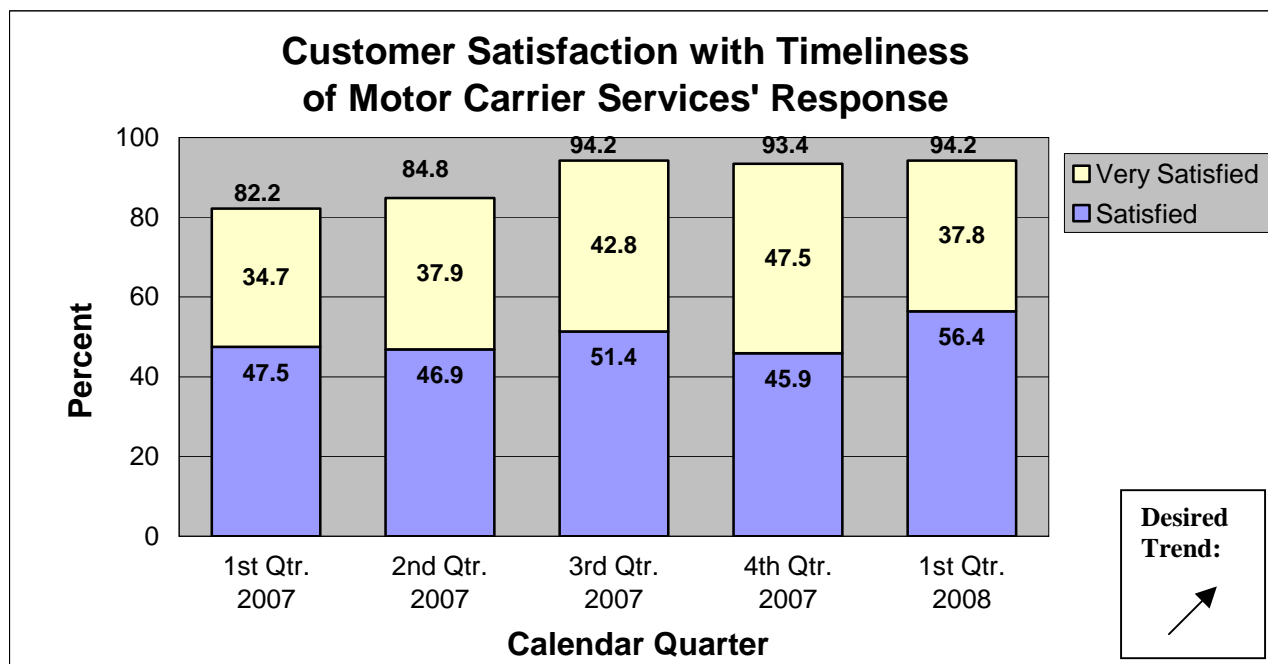
Each quarter, MoDOT's contractor, Heartland Market Research, LLC, surveys a pool of motor carriers who contacted MCS in the previous three months. These customers are asked to evaluate their satisfaction with 12 customer service factors across the five MCS program divisions, International Registration Plan, International Fuel Tax Agreement, Safety and Compliance, Over-dimension/Overweight Permitting and Operating Authority. "Timely Response" is one factor carriers evaluate with a four-point scale: 4 = Very Satisfied, 3 = Satisfied, 2 = Dissatisfied and 1 = Very Dissatisfied.

**Improvement Status:**

This quarter's data stems from customers' opinions of service received during January, February and March 2008.

Customers' satisfaction with MCS' timely response increased to 94.2 percent. At that rate, it is less than one percent higher than the fourth quarter 2007 measure and 12 percentage points better than the same time last year. The rate of "very satisfied" customers is lower. This could indicate that after a year of improvement customer expectations are rising.

One example of how MCS worked to improve response time included the efforts of Information Systems and vendors. Together, they improved the Over-dimension/Overweight permit function of MoDOT Carrier Express. Motor carriers who use the online system to request an OD/OW through permit for interstates and/or certain U.S. routes now receive permits much more quickly. In fact, the time that passes between a carrier sending a request and receiving a permit is often less than the time it took to read this paragraph.



# Easily Accessible Modal Choices

*Tangible Result Driver – Brian Weiler,  
Multimodal Operations Director*

MoDOT has an active role in all modes of transportation, including rail, air, water, and transit. Transportation is more than highways and bridges. Every day millions of tons of goods move through the state by rail. Thousands of passengers use Missouri's airport facilities. And hundreds of barges navigate state waterways. All of these modes combine to keep Missouri's economy robust and vital.



## Easily Accessible Modal Choices

### *Number of airline passengers*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joe Pestka, Administrator of Aviation

**Purpose of the Measure:**

This measure tracks the number of passengers boarding airplanes at Missouri's commercial airports. It helps determine the viability of Missouri's commercial airline industry. This number is also used by the Federal Aviation Administration (FAA) to help determine airports' capital improvement funding levels.

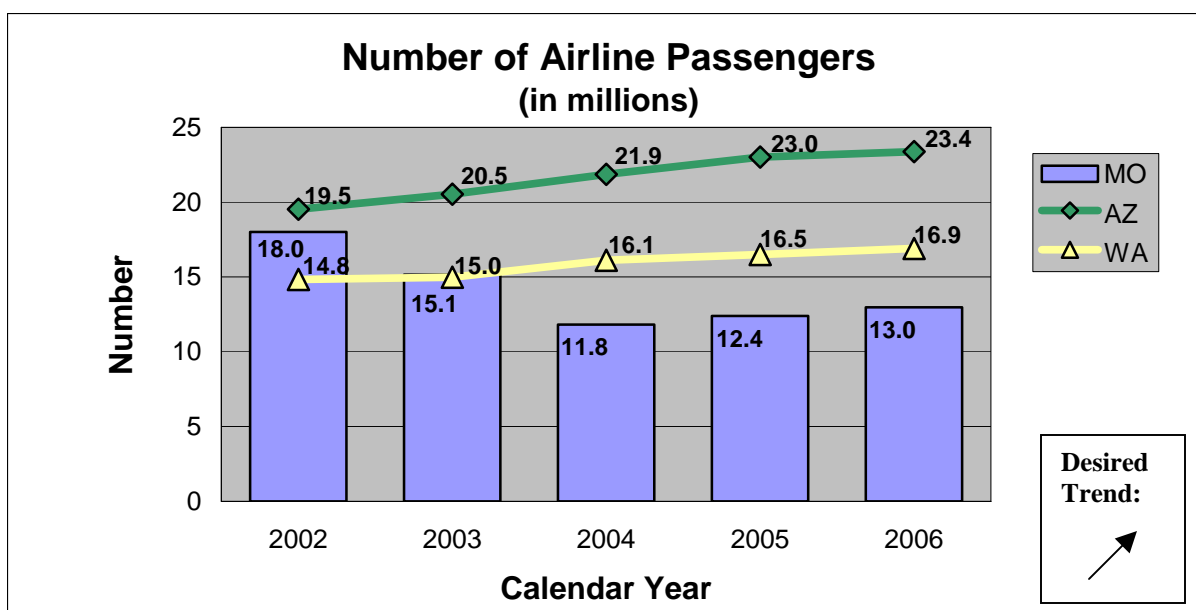
**Measurement and Data Collection:**

The data is collected annually from FAA. Comparison data has been collected from the same source for the states of Arizona and Washington. These two states were selected based on similar populations in 2004. The annual passenger boardings' data provided by the FAA is normally published in October for the preceding year. Airline passengers are defined as passengers boarding airplanes.

**Improvement Status:**

Airline passengers have increased approximately 4.7 percent in Missouri from 2005 to 2006. The significant decrease in flights by American Airlines at St. Louis Lambert International Airport (approximate reduction of 200 flights per day in November 2003) and the effects of 9/11, in part, have contributed to the decrease in airline passengers from 2002 to 2004. The reduction in American's flights at Lambert has negatively impacted growth in passenger boardings in St. Louis and in Missouri as a whole. Also, increases in airline operational costs, fluctuations in airline performance and scheduling, and airline bankruptcy filings pose challenges to communities seeking enhanced air carrier service.

State legislation passed in 2008 includes up to \$2 million annually for the study and promotion of expanded domestic or international scheduled commercial service or the study and promotion of intrastate scheduled commercial service. MoDOT is also conducting a study to review regulatory issues related to air service. The cities of Joplin and Springfield are constructing new terminal buildings to accommodate airline passengers.



## Easily Accessible Modal Choices

### *Number of daily scheduled airline flights*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joe Pestka, Administrator of Aviation

**Purpose of the Measure:**

This measure tracks the number of airline flights. The data assists in determining options available to the traveling public. It provides an indication of the airline industry's economic stability in Missouri.

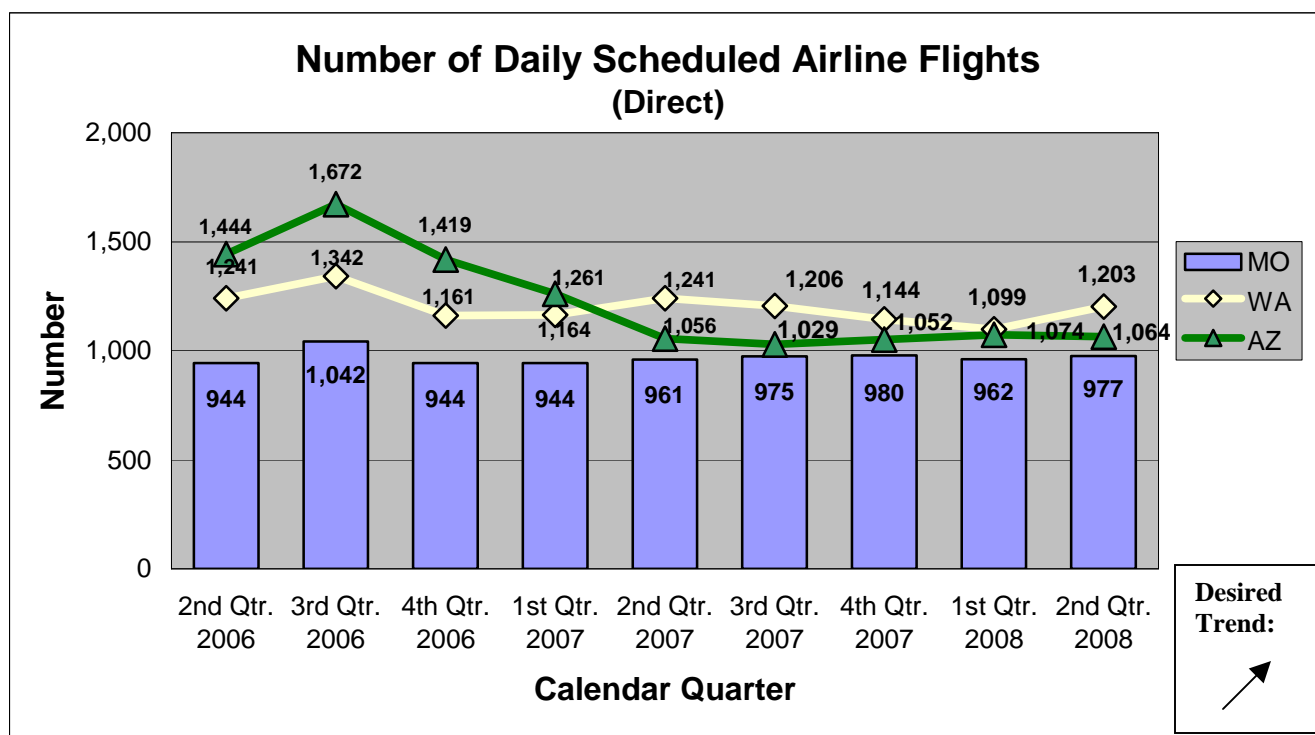
**Measurement and Data Collection:**

A direct scheduled airline flight is a take-off by a scheduled commercial air carrier. A direct flight has the same flight number and is flying to one or more destinations. Data is being collected from seven airports in the state that presently accommodate scheduled airline flights. These airports are: St. Louis Lambert International, Kansas City International, Springfield-Branson, Joplin, Columbia, Waynesville and Cape Girardeau. Comparison data has been collected for the commercial airports in Arizona and Washington. These two states were selected based on similar populations in 2004. The data is collected from the Official Airline Guide. The flights are tracked on a monthly basis with a daily snapshot collected for each month and are then averaged on a quarterly basis.

**Improvement Status:**

Daily scheduled airline flights in Missouri have increased slightly, by 1.7 percent, from the second quarter of 2007 (961) to the second quarter of 2008 (977). The number of daily scheduled flights has increased approximately 3.5 percent from the second quarter of 2006 (944) to the second quarter of 2008. The number of daily scheduled airline flights in Missouri peaked in the third quarter of 2006 at 1,042. The third quarter includes the summer travel months of July, August and September.

State legislation passed in 2008 includes up to \$2 million annually for the study and promotion of expanded domestic or international scheduled commercial service, and the study and promotion of intrastate scheduled commercial service. MoDOT is also conducting a study to review regulatory issues related to air service.



## Easily Accessible Modal Choices

### *Number of business-capable airports*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joe Pestka, Administrator of Aviation

**Purpose of the Measure:**

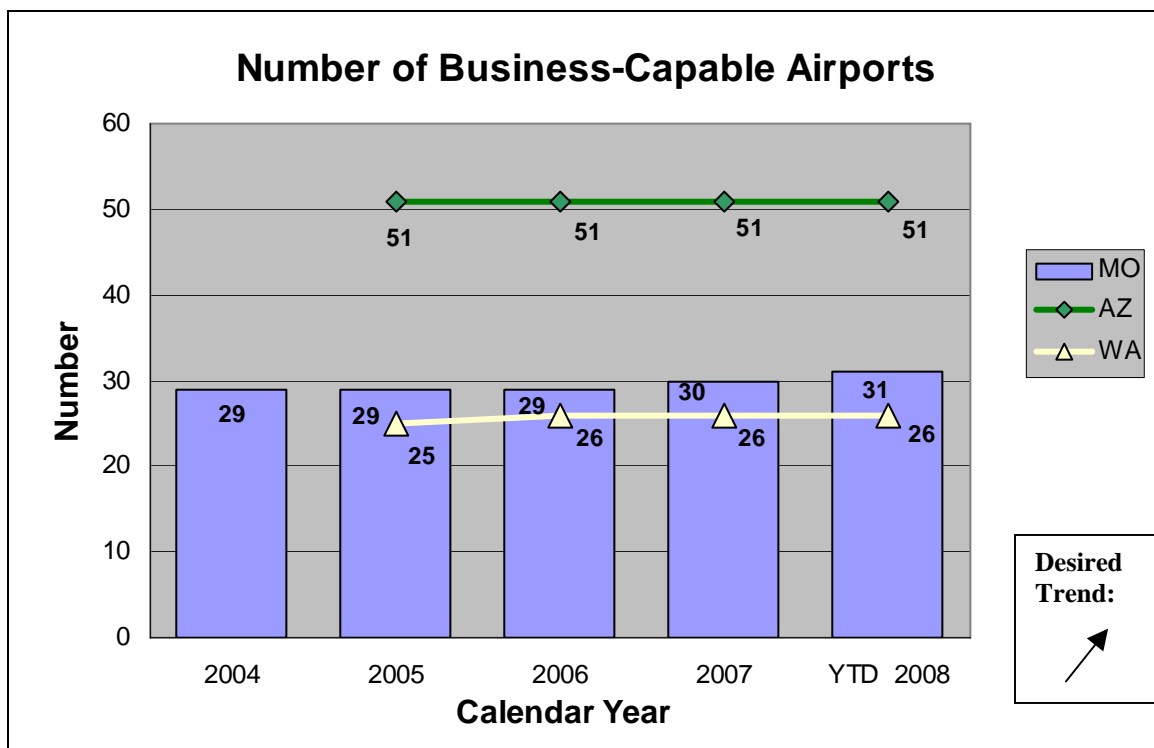
This measure tracks the number of airports capable of handling business aircraft. Local communities and economic development agencies can use airports to assist in increasing a community's economic viability for business retention and development.

**Measurement and Data Collection:**

The graph shows the number of business-capable airports. A business-capable airport is defined as accommodating business- or corporate-type aircraft with a runway length of 5,000 feet or more. Comparison data starting in 2005 has been collected from the states of Washington and Arizona. These states have a population similar to Missouri. Geographically, Washington is similar to Missouri while Arizona is approximately 65 percent larger than Missouri. Data is collected annually by monitoring airport developments and Federal Aviation Administration records.

**Improvement Status:**

The State Airport System Plan Update and the annual development of MoDOT's Statewide Transportation Improvement Plan identify airports that meet the demand criteria and would support the development of a 5,000-foot runway. In January 2008, the city of Marshall extended the runway at the Marshall Memorial Municipal Airport to 5,000 feet. A new business-capable airport is under construction in Branson West, and a runway extension to 5,000 feet is under construction in Moberly. State legislation passed in 2008 increased the cap on the State Aviation Trust Fund from \$6 million to \$10 million annually, which will allow additional funding for airport improvements.



## Easily Accessible Modal Choices

### *Number of transit passengers*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

**Purpose of the Measure:**

This measure gauges the use of public transit mobility services in Missouri. It also provides an historical perspective and trend of public transit service use in Missouri.

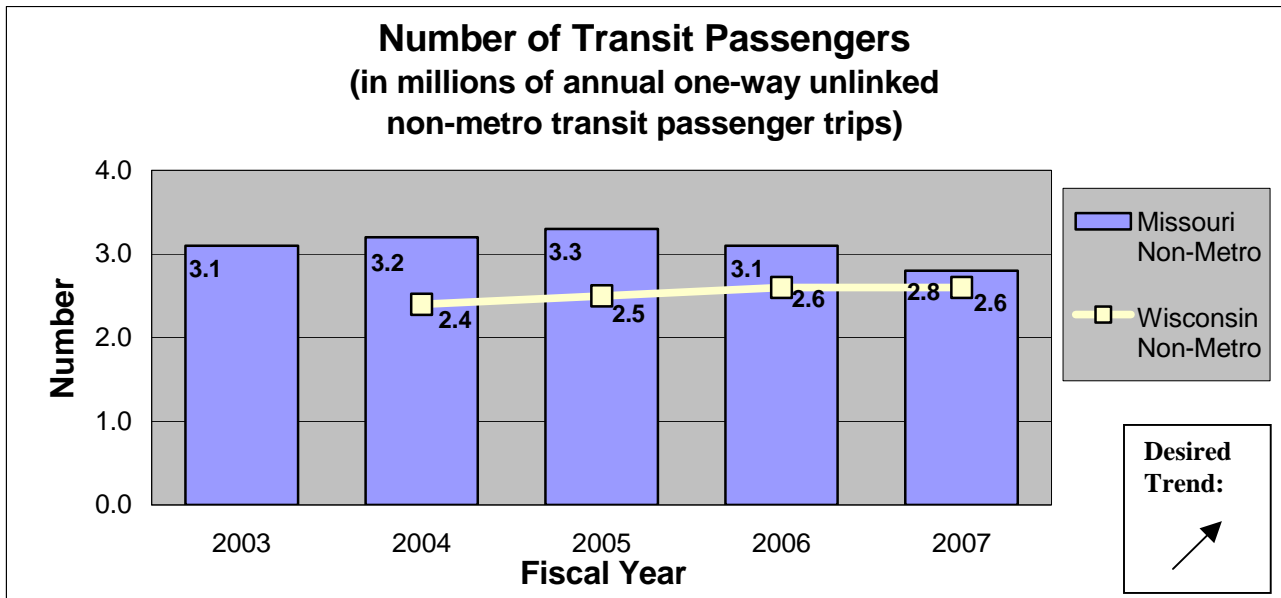
**Measurement and Data Collection:**

The total number of transit passengers is measured by the annual total of one-way unlinked transit trips taken by passengers on public transit vehicles. Data is obtained from urban and rural providers of general public transit services. The 2004-2007 measures are benchmarked to Wisconsin, which has a comparable total statewide population. This is an annual fiscal year measure with Missouri data updated in October. Wisconsin's fiscal year data is collected by the calendar year, so Wisconsin's data is updated in either April or July, as it becomes available.

**Improvement Status:**

In 2007, metro ridership statewide decreased by 1.9 million trips as compared to 2006. However, riders took more annual transit trips in all of Missouri's metro transit systems, except St. Louis and Joplin. In St. Louis, the ridership gains from the opening of the MetroLink cross-county light rail extension were more than offset by the decline in ridership on MetroBus due to a system-wide fare increase. Changes in St. Louis student transportation from transit buses to more school buses also impacted ridership there in 2007. Non-metro (rural) ridership decreased from 3.1 million trips in 2006 to 2.8 million trips in 2007. Of the 28 rural transit systems in Missouri, 12 of the systems experienced ridership gains, and the remainder experienced reductions in ridership. Virtually all of the net loss in rural transit use came as a result of curtailed services for work-related trips cut as a consequence of decreased funding to Missouri in the federal Job Access and Reverse Commute Program.

Missouri compared favorably to Wisconsin's rural transit ridership in 2004-2007. Wisconsin did not experience a rural ridership decline from 2006 to 2007, as did Missouri. However, Wisconsin's statewide transit ridership decreased in 2007, largely in response to a passenger fare increase in Milwaukee. MoDOT worked with transit providers in developing the second Missouri Rural Transit Marketing Campaign. Marketing materials were distributed to rural transit systems in October 2007 with radio and television spots first airing in January 2008.





## Easily Accessible Modal Choices

### *Average number of days per week rural transit service is available*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

**Purpose of the Measure:**

This measure identifies the average existing public transit service in rural Missouri by indicating the availability of rural mobility services for employment, medical appointments and necessary shopping.

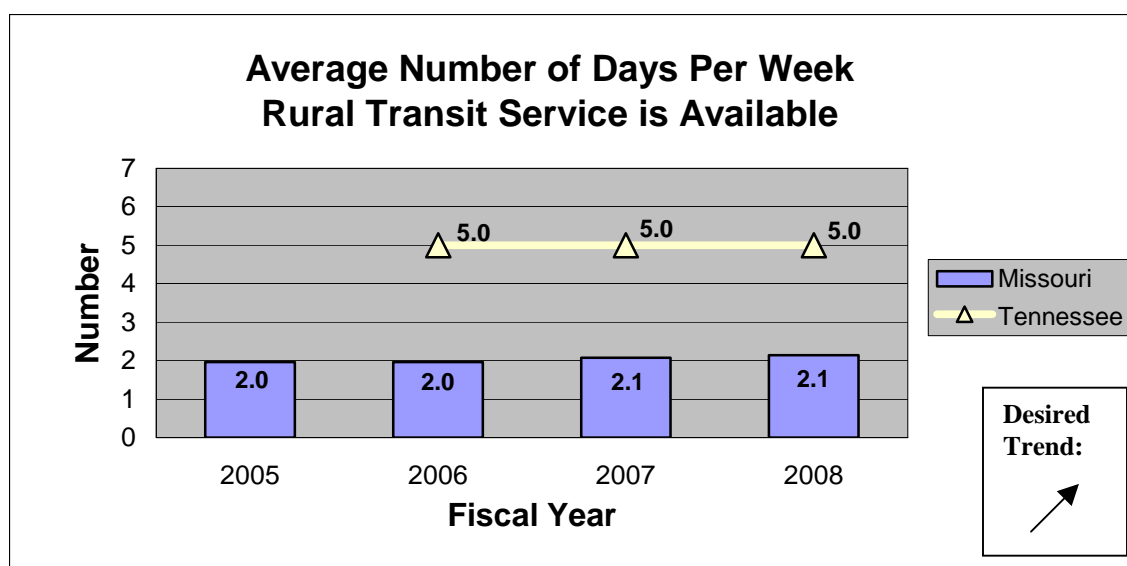
**Measurement and Data Collection:**

To calculate the statewide average number of days per week rural transit service is available, MoDOT reviews published transit service schedules for each rural Missouri county and averages these daily frequencies within a week's schedule for available county-wide transit service. Rural transit agencies operate on an annual budget and customarily make transit service changes with the start of a new budget year. This is an annual measure with updates occurring in April. The measure is benchmarked to Tennessee, which has a comparable statewide population and some amount of transit service in every rural county as does Missouri.

**Improvement Status:**

Rural transit service at a statewide average of two days per week is not sufficient to support full-time employment for its riders. For 2008, Tennessee deployed more days of rural transit service with five-day-a-week service, subject to available seating. Tennessee directs more state funding annually to rural public transportation (\$7 million vs. \$1.1 million in Missouri). Tennessee's transit providers also use pure demand-response dispatching compared to designated daily routes used by OATS and other Missouri providers. However in 2005, Missouri's rural transit providers together delivered 3.3 million trips compared to 1.4 million rural transit trips provided in Tennessee.

MoDOT worked with rural transit systems to produce a second rural transit marketing campaign. As part of this campaign, television and radio advertising began in January 2008. MoDOT also procured rural transit intelligent transportation system design services to begin projects to increase transit service through scheduling efficiencies.



## Easily Accessible Modal Choices

### Number of intercity bus stops

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

#### Purpose of the Measure:

This measure tracks the number of intercity bus stops. Intercity bus stops represent access points to intercity bus services provided by Greyhound, Jefferson Lines, Burlington Trailways and Megabus. More stops among Missouri's 114 counties means greater access. Fewer stops create a barrier to access by requiring greater traveling distances in order to board an intercity bus.

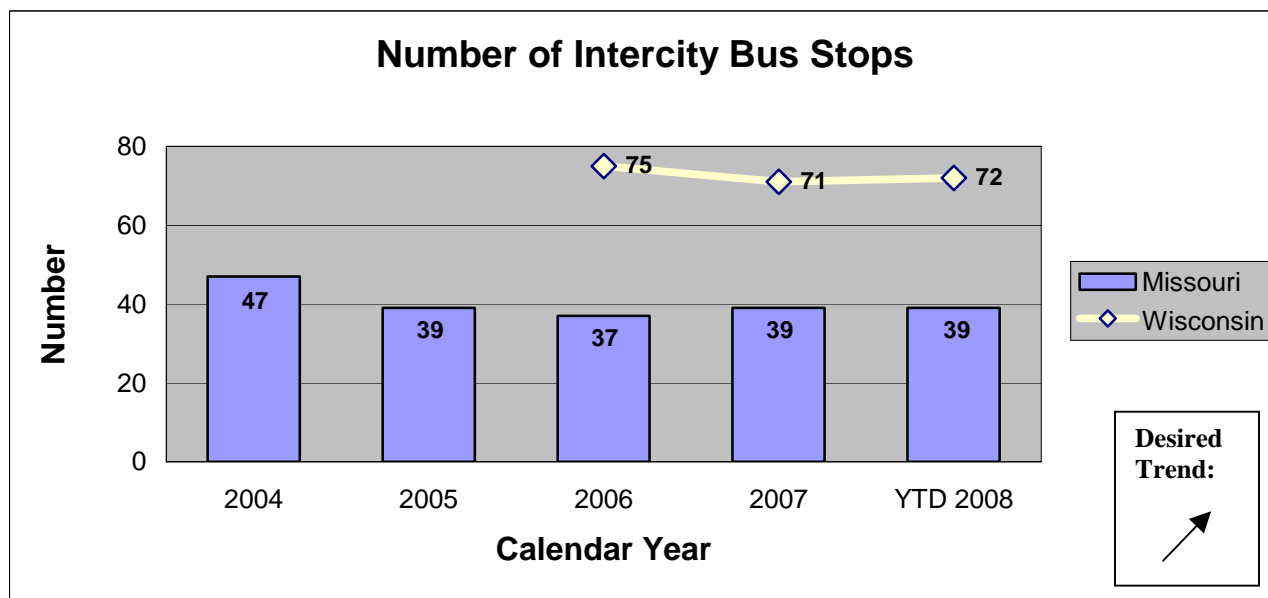
#### Measurement and Data Collection:

Data on the number and location of intercity bus stops is obtained annually from the national and regional intercity bus carriers. This is an annual measure with quarterly year-to-date updates of the most recent calendar year. The 2006 through 2008 measures are benchmarked to Wisconsin, which has a comparable total statewide population.

#### Improvement Status:

The number of Missouri's intercity bus stops has stabilized after earlier reductions in Greyhound service. Most of the recent incremental growth in Missouri's intercity bus service has increased the schedule frequency for cities already receiving service, rather than creating new bus stops in un-served areas. Megabus came to Missouri last year with stops in Kansas City and St. Louis. Megabus began stopping at Columbia in early 2008. Since the last quarterly Tracker report, Wisconsin lost flag stops at six locations in Madison but gained seven bus stops by other carriers, increasing Wisconsin's statewide intercity bus stop total by one.

A MoDOT-sponsored statewide intercity bus study has recently begun and completed initial project meetings with corporate officers of Greyhound, Jefferson Lines and Burlington Trailways. These initial meetings explored the potential for increased intercity bus stops and increased intercity bus service in Missouri.



## Easily Accessible Modal Choices

### *Number of rail passengers*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Rod Massman, Administrator of Railroads

**Purpose of the Measure:**

This measure tracks the number of people using the Amtrak train service in Missouri. This includes those taking a train trip in Missouri at any point within the state, which counts those riding on the state-supported passenger rail trains between Kansas City and St. Louis, the national trains that run through the state and the St. Louis-to-Chicago trains, most of which are supported by the state of Illinois.

For comparison purposes, the state of Washington's train data is shown based on the state's similar size, population and the fact that Washington has both national- and state-supported trains. Washington's "Cascades" train service is a model for the nation because the state invests millions of dollars in both infrastructure and operations every year.

**Measurement and Data Collection:**

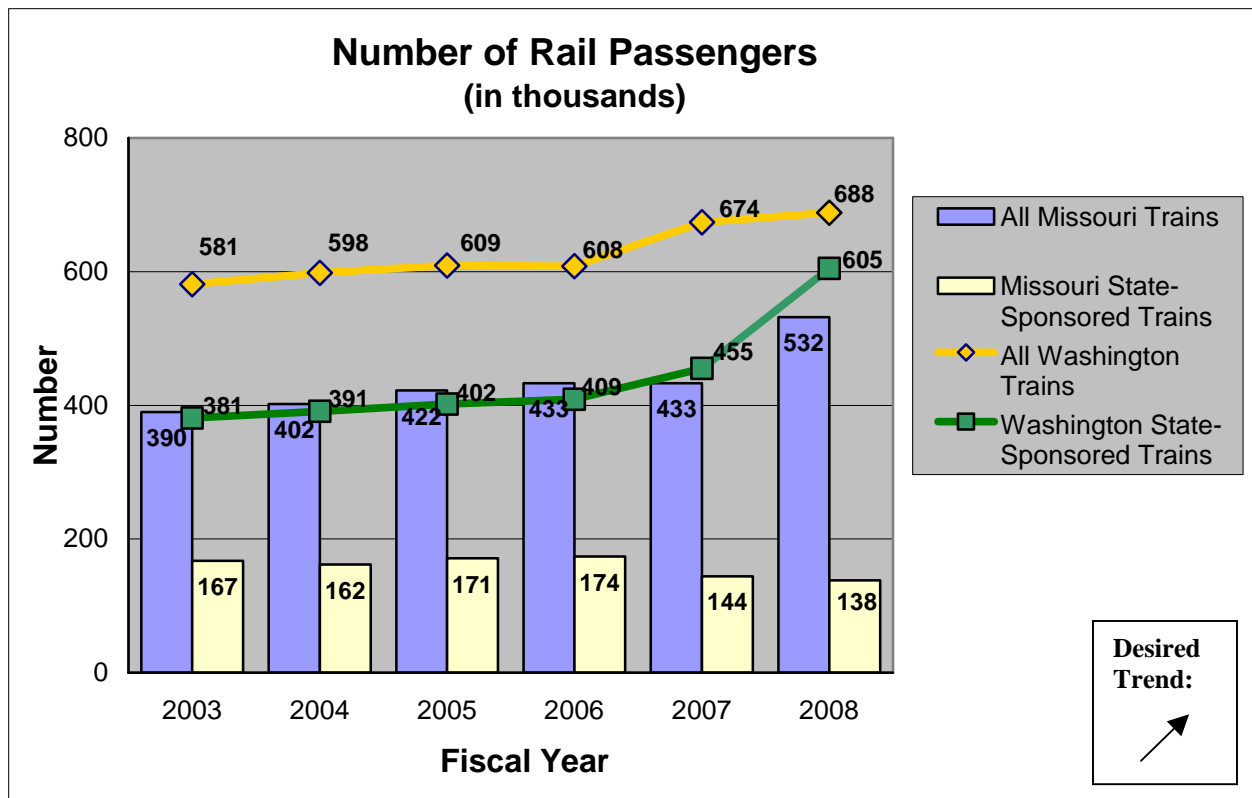
Amtrak provides the number of passengers per train in Missouri on a monthly basis. MoDOT's Multimodal Operations Division's Railroad Section then tabulates the numbers. Data is updated quarterly.

**Improvement Status:**

Fiscal year 2008 showed a decrease of about 4 percent over the previous year; however, the months of April through June 2008 showed an increase of 56 percent over the months of April through June 2007. From an external viewpoint, gas prices would have to be noted as a major factor in individuals' decisions to now choose passenger rail. Internally, MoDOT increased publicity efforts through new roadside signs, news releases, a wide-ranging distribution of train schedules, a focus on college students and senior centers, and special mailings to school groups. These efforts, along with a variety of other new publicity efforts such as combining appearances at rail safety fairs with Amtrak information and ticket giveaways, and the use of MoDOT's new dynamic message signs along the interstate system will continue to be implemented in efforts to increase passenger numbers.

The track Amtrak operates on is owned by the Union Pacific Railroad and is a heavily used freight line with more than 50 trains a day. This makes it difficult to easily "flow" the trains for on-time performance. In response to this continual problem, MoDOT commissioned a study for freight and passenger capacity improvements on the Union Pacific line between St. Louis and Kansas City. This study was completed in July 2007 and contained many options for infrastructure improvements along the line mostly between Jefferson City and Kansas City. The Missouri Highways and Transportation Commission approved the study. The Missouri Legislature provided \$5 million of new funding for infrastructure improvements in the 2008 budget, which was finalized in May. Missouri Governor Matt Blunt then approved the state budget in June 2008. MoDOT is currently seeking a \$5 million match from the Federal Railroad Administration to complement these new state funds.

This new funding will be used to improve passenger rail service in Missouri by targeting track infrastructure improvements that will increase fluidity and decrease delays. This will be accomplished through the construction/extension of more railroad track sidings in west-central Missouri on Union Pacific's track. The new funds, along with Union Pacific's ongoing infrastructure improvements at the Gasconade and Osage river bridges, could profoundly impact the reliability of the service's future.



## Easily Accessible Modal Choices

### *Number of passengers and vehicles transported by ferryboat*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Sherrie Turley, Waterways Program Manager

**Purpose of the Measure:**

This measure tracks information regarding use of ferryboat services in Missouri.

**Measurement and Data Collection:**

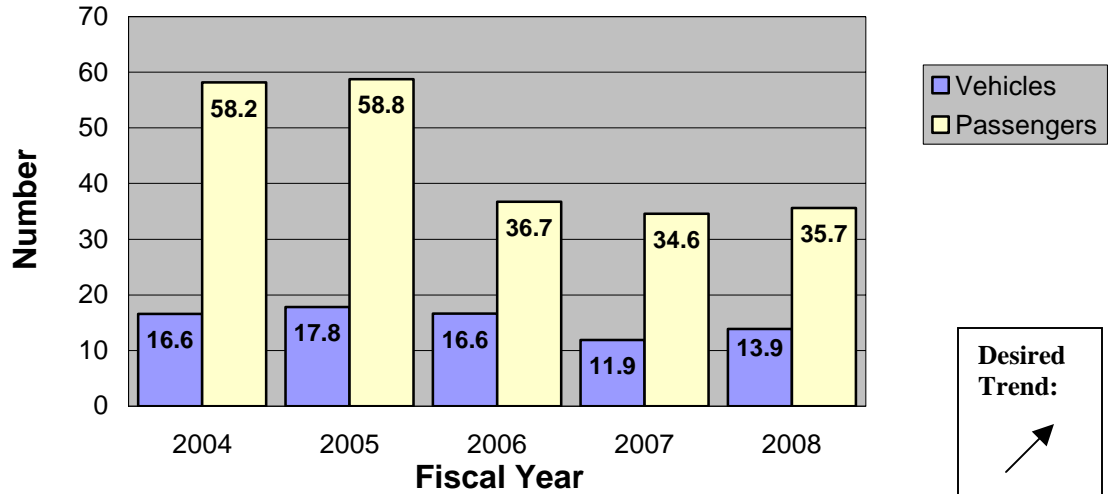
Missouri's two ferry services submit a monthly report that includes information on the number of passengers and vehicles, the cost for providing the service and the reasons for any service disruption. This measure is updated on a quarterly basis.

**Improvement Status:**

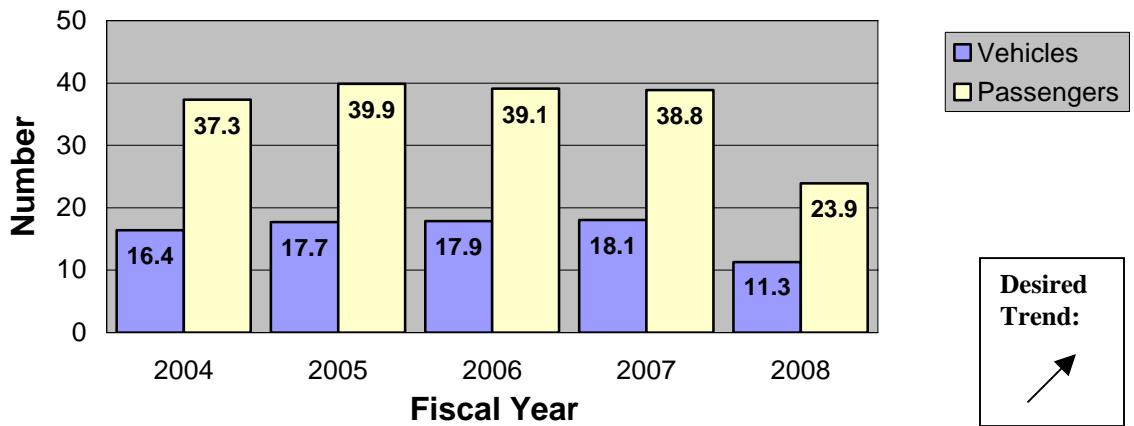
The New Bourbon ferryboat was closed much of the last quarter for high water. The ferry operated 17 days in April, nine days in May and seven days in June – a total of 292 days for the 2008 fiscal year, compared to 319 in the previous fiscal year. In fiscal year 2008, the ferry transported 13,852 vehicles compared to 11,865 in fiscal year 2007 for a 17 percent increase. The number of passengers increased from 34,573 in fiscal year 2007 to 35,654 in fiscal year 2008 for an increase of 3 percent.

The Mississippi County ferryboat closed due to high water March 12, 2008. When preparing to reopen for service April 22, an engine overheated and further inspection indicated that both engines need a complete overhaul. The subsidy for the fiscal year had been exhausted. MoDOT has assisted the port in applying for funds from other sources. An application to the Delta Regional Authority was denied, and the port is now applying for a grant from USDA Rural Development. The service did not operate during the last quarter of the year. The annual total for vehicles in fiscal year 2008 was 11,305 compared to 18,073 in fiscal year 2007 for a decrease of 37 percent. The annual total for passengers in fiscal year 2008 was 23,929 compared to 38,840 in fiscal year 2007 for a 38 percent decrease. The service operated 251 days in fiscal year 2008 and 275 days in fiscal year 2007.

**Number of Passengers and Vehicles  
Transported by Ferryboat  
New Bourbon Regional  
(in thousands)**



**Number of Passengers and Vehicles  
Transported by Ferryboat  
Mississippi County  
(in thousands)**



## Easily Accessible Modal Choices

### *State funding for multimodal programs*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Lisa Hueste, Senior Resource Management Analyst

**Purpose of the Measure:**

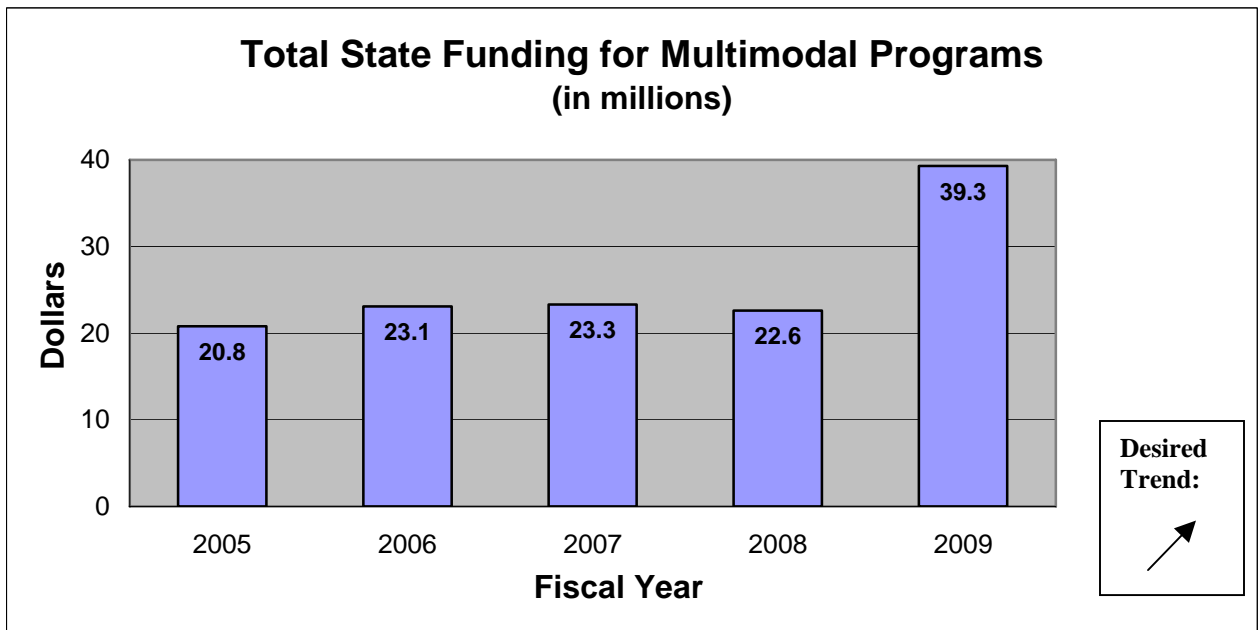
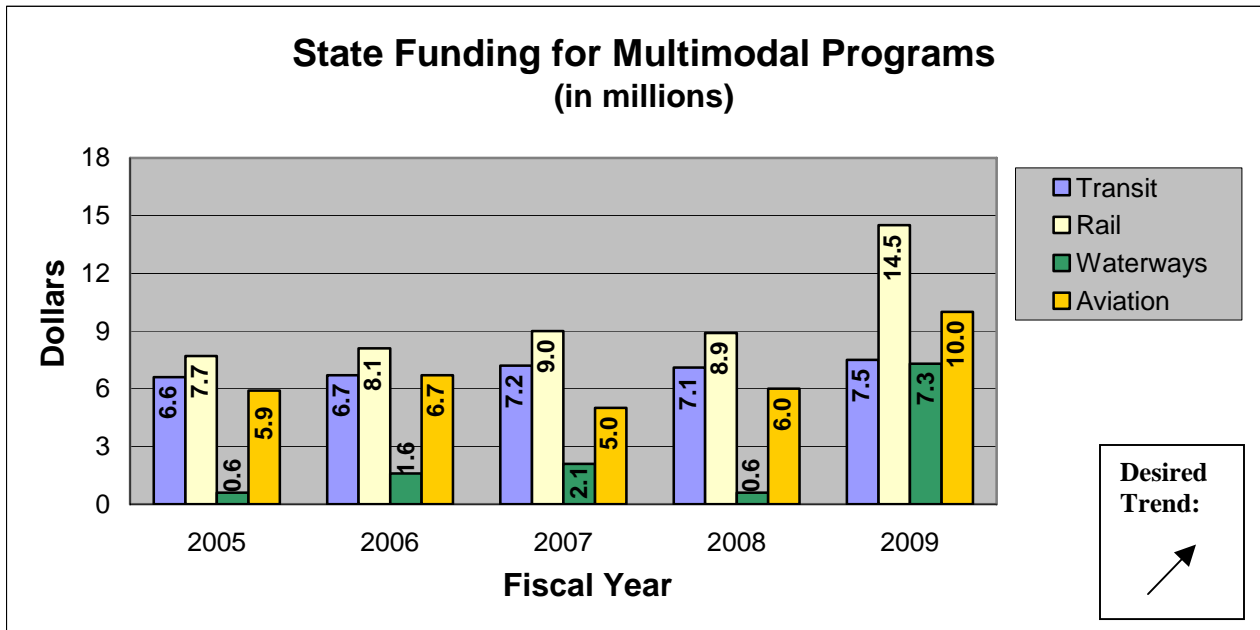
This measure provides the history of state funding appropriated by the Missouri state legislature for multimodal programs that include transit, rail, air and waterways.

**Measurement and Data Collection:**

State funding for multimodal programs is determined by the amount of revenue the state collects each year. MoDOT has several funds, including the General Revenue Fund, dedicated to multimodal programs for assisting Missouri citizens. The spending of funds throughout the fiscal year must be requested and authorized by MoDOT and the state legislature. The legislature may also authorize spending through bills filed by the General Assembly. This is an annual measure updated each July.

**Improvement Status:**

The 2008 legislative session resulted in funding increases for each of the multimodal programs. Overall, the programs received \$39.3 million for fiscal year 2009, an increase of \$16.7 million more than fiscal year 2008. Transit received a \$500,000 increase for the Missouri Elderly and Handicapped Transportation Assistance Program; however, the 2008 one-time increase of \$150,000 to the City of Springfield was removed from the FY 2009 transit program. Rail increased \$5.6 million over fiscal year 2008. The legislature approved \$5 million for capital improvements to Union Pacific's mainline to increase Amtrak's on-time performance and an increase of \$600,000 in state assistance for Amtrak to provide daily rail service. Waterways received \$6.65 million in capital improvement funding for infrastructure development. These funds will be shared among seven port authorities. The aviation program will have an additional \$4 million available for aviation projects due to passage of Senate Bill 930. This bill increases the cap amount received from aviation jet fuel tax from \$6 million to \$10 million. MoDOT continues to work with legislators to show the importance of how multimodal programs can effectively use state funds to improve economic development and provide needed services for Missouri's citizens.





## Easily Accessible Modal Choices

### *Percent of customers satisfied with transportation options*

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Eric Curtit, Long-Range Transportation Planning Coordinator

**Purpose of the Measure:**

This measure provides information about the public's perception of MoDOT's performance in providing transportation options other than Missourians' personal vehicle.

**Measurement and Data Collection:**

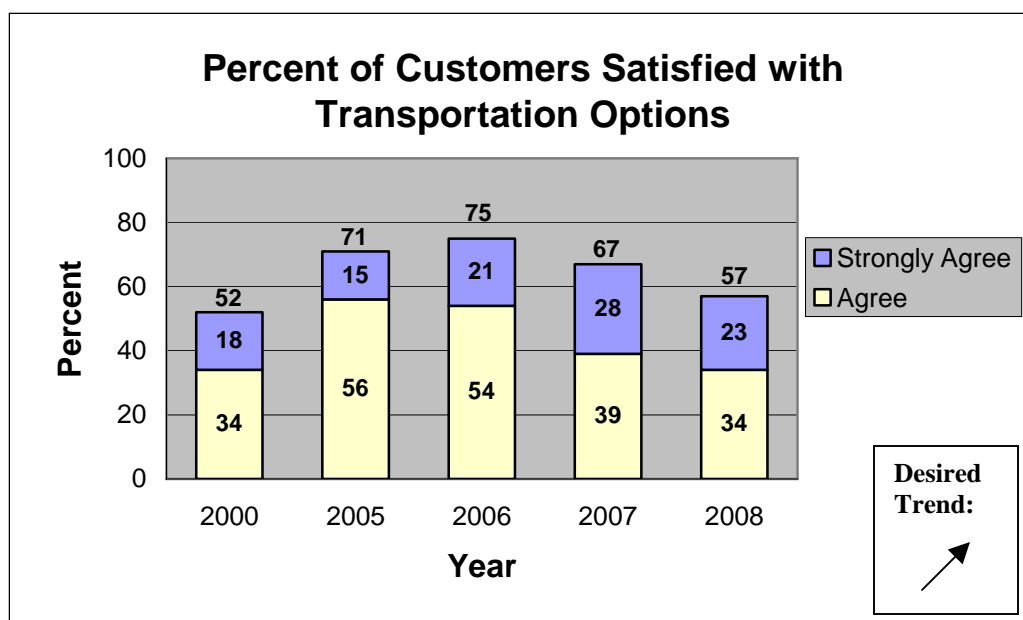
This is an annual measure. Data is collected each May from interviews of approximately 3,500 randomly selected adult Missourians with an overall margin of error of +/- 2 percent.

**Improvement Status:**

Fifty-seven percent of MoDOT's customers are satisfied with transportation options in Missouri. This measure decreased by 10 percent from last year's results. There was also a 6 percent decrease in customers who strongly agree they are satisfied with transportation options. Much of this downward trend is attributed to rising fuel prices.

During the 2008 legislative session, alternative transportation modes received funding increases. Ports received a record \$6.65 million to increase their effectiveness. The railroad used for Missouri Amtrak service received \$5 million targeted at improving reliability. A transit program for the elderly and handicapped saw a \$500,000 funding increase.

In 2007, regional planning commissions and metropolitan planning organizations outlined their highest transportation priorities. Subsequently, MoDOT developed a transportation investment package designed to meet Missourian's expectations. This investment package includes transportation improvements in all modes including increased services to public transportation, more reliable passenger rail service and port enhancements.



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# Customer Involvement in Transportation Decision-Making

*Tangible Result Driver – Dave Nichols,  
Director of Program Delivery*

MoDOT seeks out and welcomes any idea that increases its options, because the department doesn't have all the answers. The department creates and preserves a transportation decision-making process that is collaborative and transparent, involving its customers in the determination of needs right through to the development, design and delivery of projects.



## Customer Involvement in Transportation Decision-Making

### *Number of customers who attend transportation-related meetings*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Bob Brendel, Outreach Coordinator

**Purpose of the Measure:**

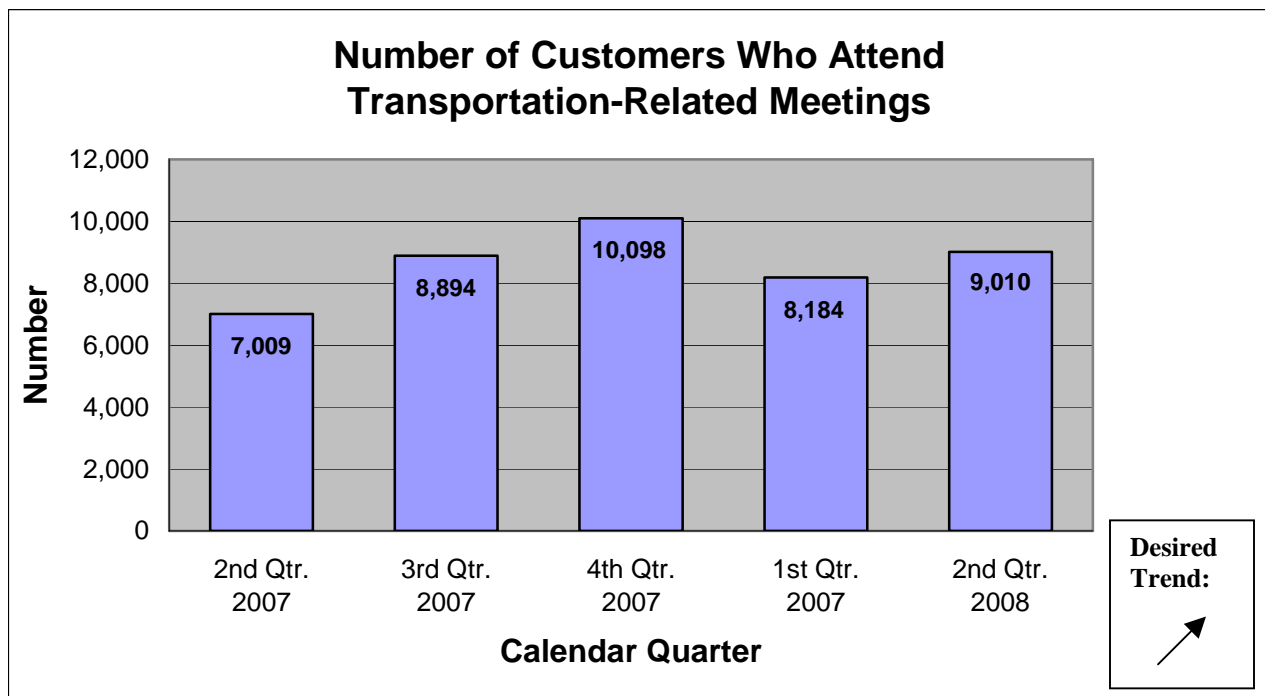
This measure gauges MoDOT's public involvement success – both in terms of public meetings and hearings that are held to make collaborative decisions with the general public, communities, elected officials, stakeholders, and in terms of public informational events scheduled by MoDOT to keep its customers advised of project status and potential impacts that could be experienced.

**Measurement and Data Collection:**

Attendance is determined by analyzing sign-in sheets used at public meetings or by head counts conducted by MoDOT staff. This measure is updated quarterly.

**Improvement Status:**

Just over 9,000 persons attended transportation-related meetings in the second quarter of 2008, a 28.5 percent increase over the same quarter in 2007, and a 10 percent increase over the first quarter of 2008. MoDOT emphasizes customer involvement in the decision-making process and in providing the information that drivers need to cope with the impacts of construction. MoDOT Community Relations managers meet quarterly to review this measure and to share best practices that help improve performance.



## Customer Involvement in Transportation Decision-Making

### *Percent of customers who are satisfied with feedback they receive from MoDOT after offering comments*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Bob Brendel, Outreach Coordinator

**Purpose of the Measure:**

This measure tracks MoDOT's responses to its customers. MoDOT routinely asks people who attend public meetings/hearings to submit comments that will be examined by the project team and will become part of the project's official record. It is important that people who avail themselves of this opportunity know that their comments are taken seriously.

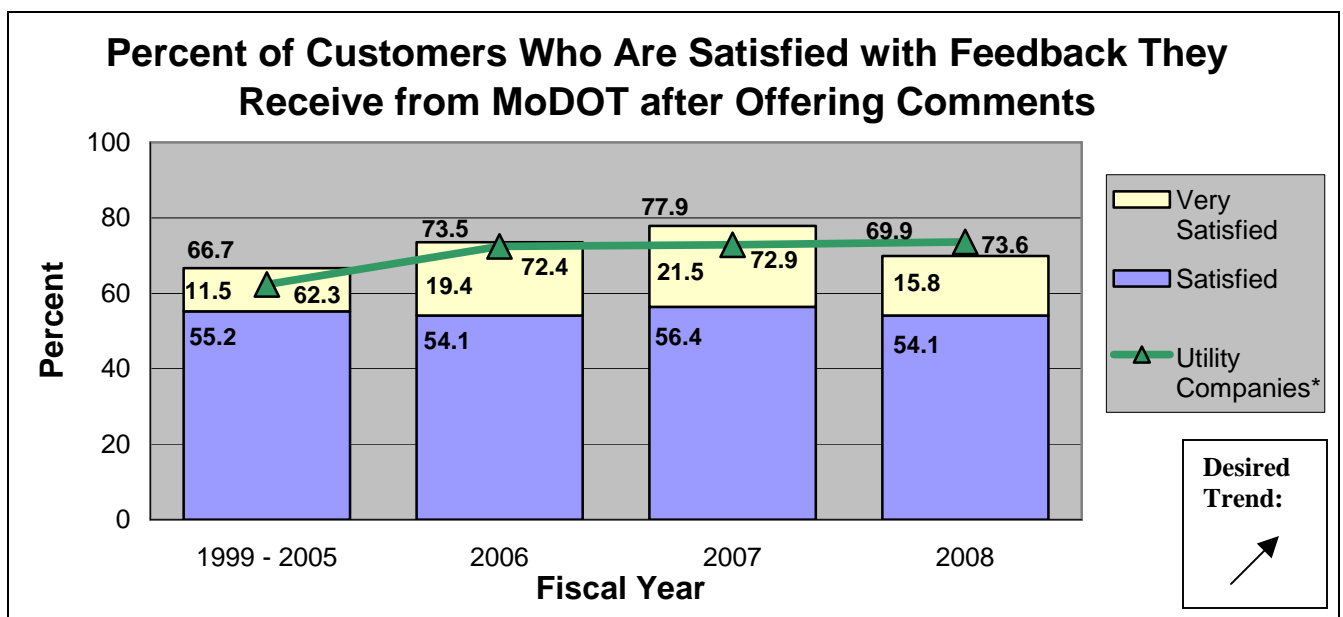
**Measurement and Data Collection:**

MoDOT routinely coordinates a survey in cooperation with university partners for persons who attend project-specific meetings and hearings. The initial survey was sent to more than 4,500 persons who attended meetings in a five-year period. A survey process continues, with contacts made each time a project reaches the official public hearing milestone. This is an annual measure based upon a fiscal year, and data is analyzed twice each year.

**Improvement Status:**

Twenty-three projects were surveyed across seven of MoDOT's 10 districts in fiscal year 2008 and the entire key measures fell from their peak in fiscal year 2007. Overall satisfaction fell eight percent (77.9 to 69.9). Since surveys are sent to all attendees of milestone meetings, projects that attract more members of the public have a greater impact on the overall results (and controversial projects typically have the highest attendance). Three projects were responsible for a total of 61.5 percent of all those who expressed dissatisfaction with how comments and questions were answered. This also resulted in a drop for the other two key indicators: 80.9 percent thought projects were explained clearly (down from 90.3) and 68.2 percent felt that the decision-making process was open, transparent and fair (down from 77.1).

Quarterly discussions and reviews of Tracker measures with MoDOT Community Relations managers across the state have been held to share best practices on projects with high satisfaction rates and to encourage thorough and prompt submittal of contact lists of projects that conduct public hearings.



\*As measured by the American Customer Satisfaction Index.

## Customer Involvement in Transportation Decision-Making

### *MoDOT takes into consideration customers' needs and views in transportation decision-making*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Sue Cox, Transportation Planning Special Projects Coordinator

**Purpose of the Measure:**

This data helps determine the effectiveness of MoDOT's project planning outreach efforts.

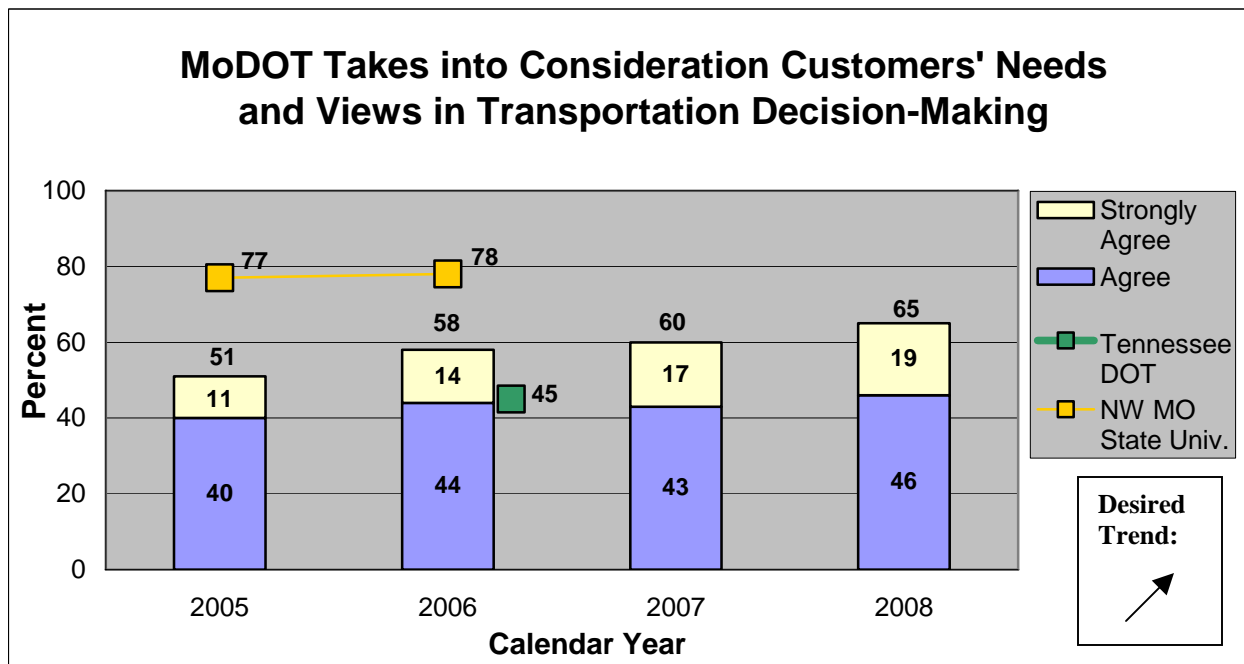
**Measurement and Data Collection:**

This is an annual measure, and this year's data, gathered from a statewide random telephone survey of approximately 3,500 Missourians, was collected in May 2008. A comparison is made to the Tennessee Department of Transportation, which also measures customers' perceptions regarding involvement in transportation decision-making. Tennessee's 2006 performance data is the most recent available data.

**Improvement Status:**

MoDOT learned in the 2008 customer survey that 65 percent of the survey sample feels MoDOT considers customer concerns and needs when developing transportation decisions. This is an increase of 5 percent, moving up from 60 percent in 2007. A new benchmark has been identified. Northwest Missouri State University measures student satisfaction concerning student opportunities to provide input regarding student affairs by surveying NMSU freshmen and juniors using a scale from 1 to 7 with 7 being the best performance. Data from 2006 is the most current information available due to the university's one-year lag time in gathering results.

To continuously improve in this area, MoDOT identifies additional opportunities to use techniques as outlined in the planning framework decision-making and public involvement process with local officials, planning partners, community leaders, elected officials and the general public. Media interviews, Web site publicity, news releases, newsletters, specific project surveys, public involvement surveys and community meetings continually provide new opportunities to interact with the public, share MoDOT's direction and discuss transportation priorities.



## Customer Involvement in Transportation Decision-Making

### *Percent of positive feedback responses received from planning partners regarding involvement in transportation decision-making*

**Result Driver:** Dave Nichols, Director of Program Delivery

**Measurement Driver:** Sue Cox, Transportation Planning Special Projects Coordinator

**Purpose of the Measure:**

This measures MoDOT's efforts to include statewide planning partners (members of metropolitan planning organizations and regional planning commissions) in transportation-related decision-making.

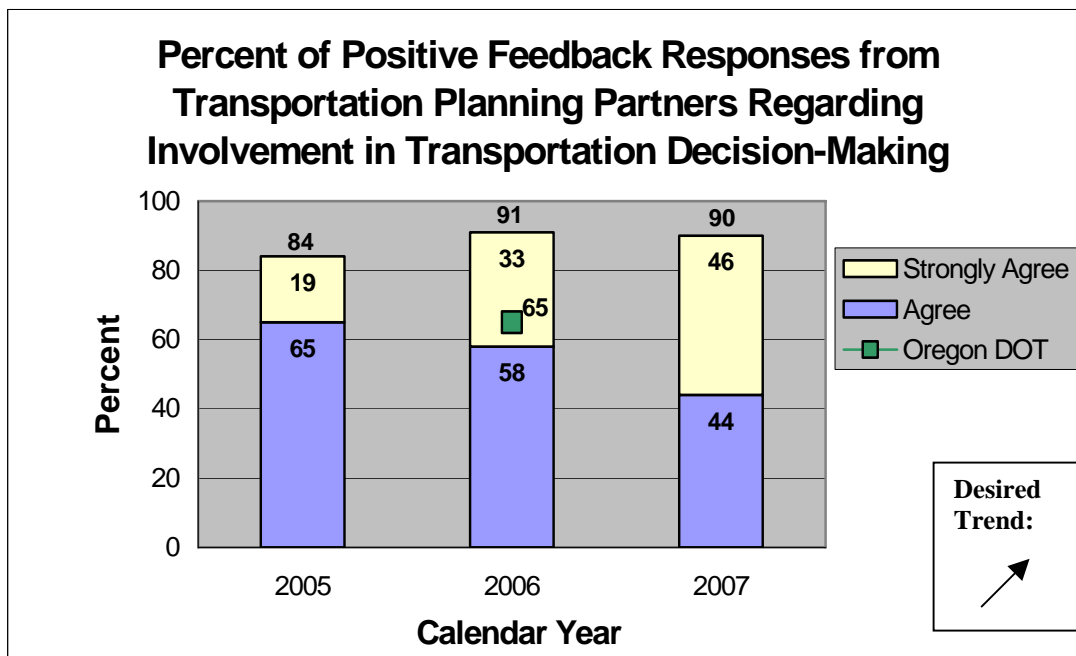
**Measurement and Data Collection:**

MoDOT Transportation Planning works with MoDOT's Organizational Results Division to administer an annual survey that evaluates planning partners' involvement in the transportation decision-making process. The survey answers are based on a scale that measures those who strongly agree, agree, disagree and strongly disagree.

**Improvement Status:**

The 2007 survey received 72 responses from 146 distributed e-mails resulting in a 49.3 percent response rate. Although the 2007 results indicate a 90 percent satisfaction rate, a slight decrease from 91 percent satisfaction in 2006, the percent of strongly agree answers increased from 33 percent in 2006 to 46 percent in 2007. The annual survey focuses on feedback regarding the overall involvement of planning partners in the planning process rather than on individual MoDOT outreach activities. In 2006, which is the most recent data available, the Oregon DOT shows 65 percent of all respondents involved in transportation planning feel their involvement in decision-making was effective.

To continuously improve in this area, MoDOT implements effective communication, and public involvement tools and techniques based on the survey respondents' written comments. MoDOT's planning framework, which is a process used to ensure planning partners are able to influence transportation decisions regarding how transportation funds will be spent in their areas, is based on achieving informed consent. MoDOT is learning new ways to get better involvement, fine-tune communication and try out ideas that support positive improvements by listening to planning partners and by working with MoDOT internally to identify and improve opportunities and methods to enhance relationships with planning partners.



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# Convenient, Clean and Safe Roadside Accommodations

*Tangible Result Driver – Don Hillis,  
Director of System Management*

Many Missouri motorists depend on roadside parks and rest areas during their travels for the opportunity to rest and refresh themselves in a safe environment. Providing safe, clean and convenient accommodations allows motorists to travel more safely and comfortably.



## Convenient, Clean and Safe Roadside Accommodations

### *Percent of customers satisfied with rest areas' convenience, cleanliness and safety*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Jim Carney, State Maintenance Engineer

**Purpose of the Measure:**

This measure helps MoDOT understand customer expectations concerning the convenience, cleanliness and safety of its rest areas. This information will provide insight to rest area location, lighting and security as well as the overall cleanliness expectations.

**Measurement and Data Collection:**

MoDOT measures this attribute with both internal and external data collection. MoDOT receives information from a survey card offered at all rest areas. The survey cards asks a variety of questions with three of the questions specifically asking if the rest area is convenient, clean and safe. This provides direct input from our customers and is considered the external source. All comments from the cards are sent to the districts and sheltered workshop contractor to ensure concerns are addressed in a timely manner.

To ensure the customer satisfaction, all rest areas are inspected using an attribute list developed and based on an industry-wide literature review. The attribute list includes characteristics rest-area users identified as what they consider convenient, clean and safe. MoDOT maintenance employees inspect all rest areas and the work of the sheltered workshop contractor at least two times per month using this list and are considered the internal source.

MoDOT works with Extended Employment Sheltered Workshops to provide the cleaning at all 19 rest areas in the system. The sheltered workshop employees provide this service 365 days a year, many from early morning (6 a.m.) to late in the evening (10 p.m.). This measure is updated quarterly.

**Improvement Status:**

The rest area survey cards were made available in May 2005. The increase in the number of returned cards corresponds with the seasonal increase in visitors to the rest areas. A total of 9,774 cards were returned in fiscal year 2008 compared to 8,178 in fiscal year 2007 and 8,054 in 2006. In the fourth quarter of fiscal year 2008, 1,918 cards were returned. This is lower than the number of returned surveys in the fourth quarter of fiscal year 2007.

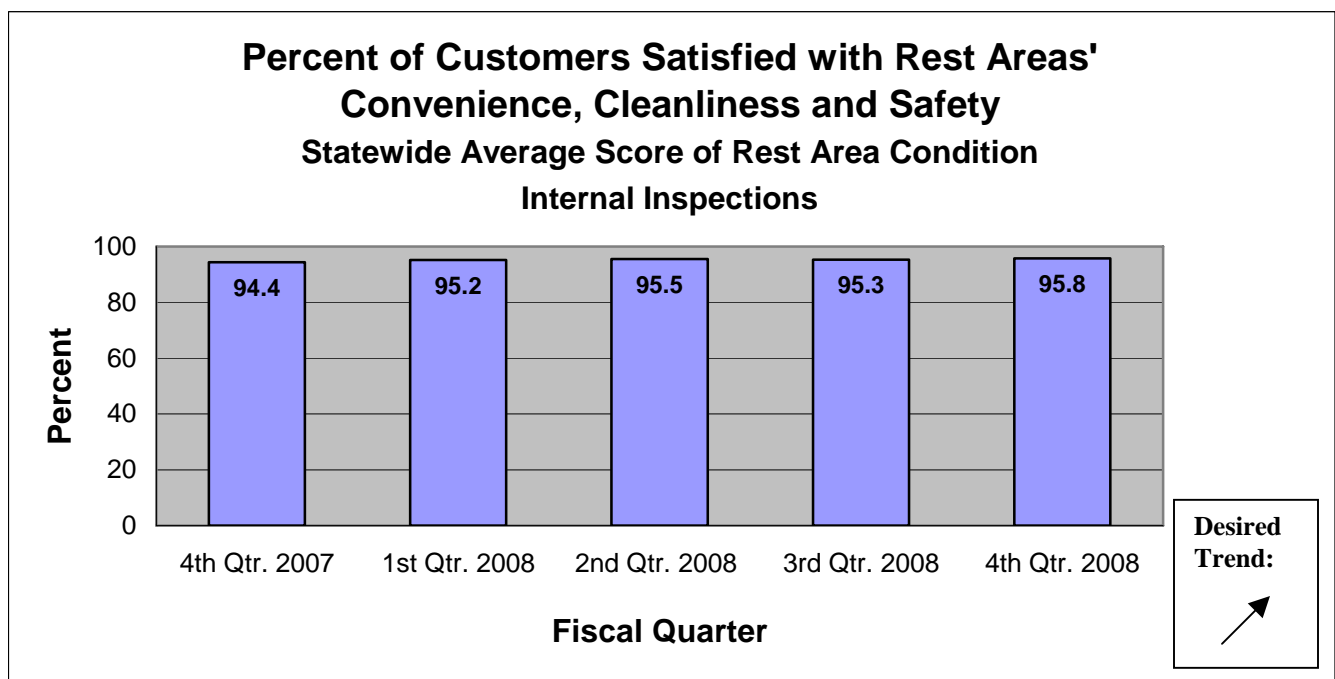
- Fourth Quarter fiscal year 2007, 2,776 surveys received
- First Quarter fiscal year 2008, 4,653 surveys received
- Second Quarter fiscal year 2008, 1,945 surveys received
- Third Quarter fiscal year 2008, 1,195 surveys received
- Fourth Quarter fiscal year 2008, 1,981 surveys received

Customer satisfaction for the three attributes is slightly higher in cleanliness and safety and lower in convenience when compared to the previous quarter but not by a significant amount. The “not clean” comments were from isolated sites rather than one location. MoDOT implements actions to improve the cleanliness at rest areas with lower satisfaction ratings by direct contact with the contractor. Cards were returned from 49 states, Canada, Ireland, the United Kingdom, Switzerland, Mongolia, China and Spain.

MoDOT is doing extremely well at meeting the customers' expectations for convenient, clean and safe facilities; largely in part to these inspections conducted a minimum of two times per month. The inspection scores increased from 95.3 to 95.8 percent for the fourth quarter of fiscal year 2008, higher than the same time period of fiscal year 2007. MoDOT takes care of maintenance concerns in a timely manner to keep the rest areas open for use.



Note: Rest area customer satisfaction benchmarks are limited. Florida's 2004 rest area customer survey results found: 90 percent said the rest areas were clean, 83 percent said there were enough rest areas and 88 percent said the rest areas were safe.



## Convenient, Clean and Safe Roadside Accommodations

### *Percent of customers satisfied with commuter lots' convenience, cleanliness and safety*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Tim Chojnacki, Maintenance Liaison Engineer

**Purpose of the Measure:**

This measure will help the department understand customer expectations concerning commuter lot convenience, cleanliness and safety. This information will provide insight to location, lighting and security at commuter lots as well as their overall cleanliness.

**Measurement and Data Collection:**

MoDOT receives information in the form of survey cards distributed by MoDOT employees at 20 commuter lots. The survey contains a variety of questions, three of which specifically ask if the commuter lot is convenient, clean and safe. This is a baseline measure that provides direct input from the department's customers and is considered an external source. This is an annual measure updated each January.

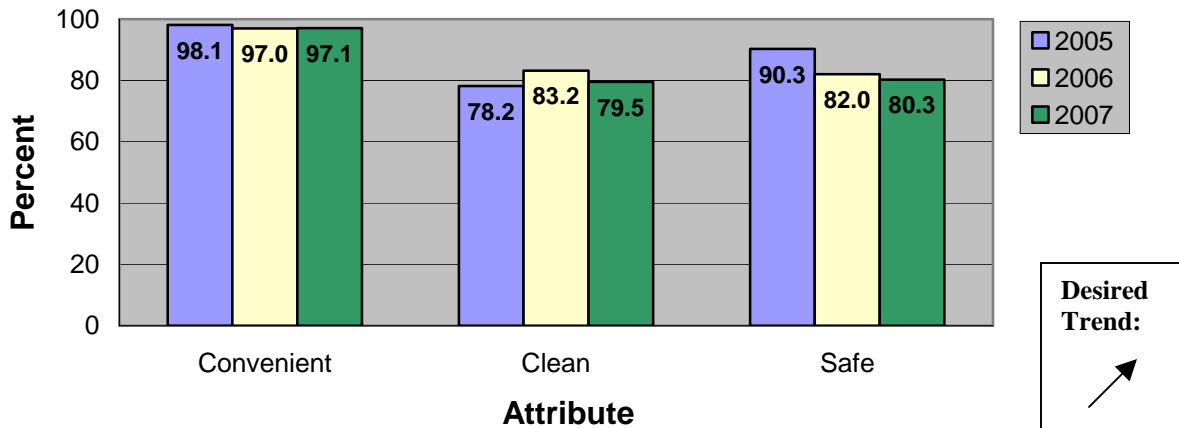
To further assess condition and ensure customer satisfaction with the commuter lots, all lots are inspected based on attributes identified in an industry-wide literature review as to what commuter lot customers consider convenient, clean and safe. MoDOT maintenance employees inspect all commuter lots each quarter. This measure is updated quarterly.

**Improvement Status:**

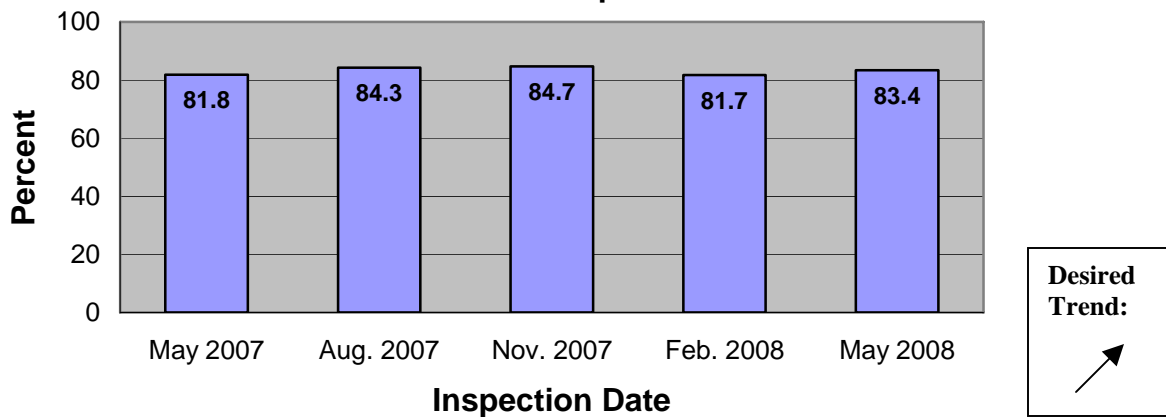
Commuter lot survey cards were distributed to 910 customers in December 2007 and the department received 346 responses. Ninety-seven percent of the customers thought the lots were convenient with 71 percent using them at least five days per week. Eighty-seven percent cited saving fuel costs as the most important reason to use the lot. Seventy-nine percent of the customers were satisfied with cleanliness. MoDOT received many comments about litter and the need for trash cans. Eighty percent of customers were satisfied with safety at the lots with several customers expressing the need for additional lighting and almost nine percent reporting theft and property damage concerns. To address safety concerns, MoDOT has installed a managed surveillance system at two commuter lots in the St. Louis area and met with local law enforcement to familiarize them with the system. Additional law enforcement signing has been posted at some lots.

The quarterly inspections provide input to district maintenance supervisors on work needed at the commuter lot for condition of signs, parking lot surface, litter, and vegetation management. The May 2008 inspections indicated an improvement in the statewide average condition from 81.7 in February of 2008 to 83.4 percent. The condition is also higher than the score of 81.8 percent one year ago.

### Percent of Customers Satisfied with Commuter Lots' Convenience, Cleanliness and Safety



### Percent of Customers Satisfied with Commuter Lots' Convenience, Cleanliness and Safety Statewide Average Score of Commuter Lot Condition Internal Inspections



## Convenient, Clean and Safe Roadside Accommodations

### *Number of users of commuter parking lots*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Tim Chojnacki, Maintenance Liaison Engineer

**Purpose of the Measure:**

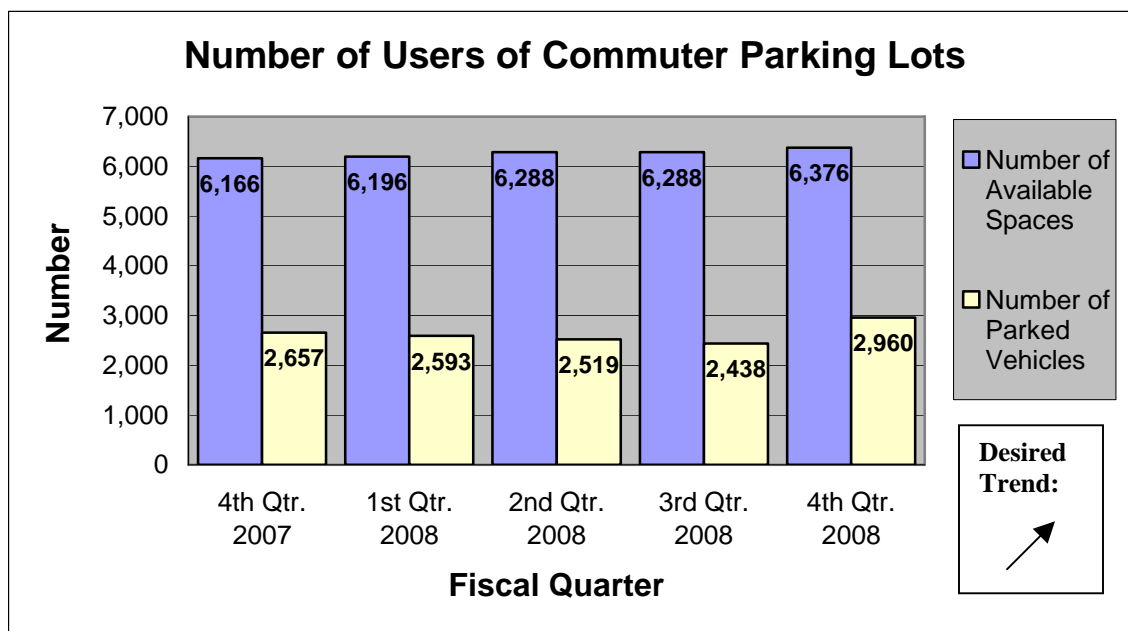
This measure tracks the number of commuter parking lot users. It will help the department determine whether its commuter parking lots are adequate at current locations and whether lots are fulfilling the needs of the traveling public.

**Measurement and Data Collection:**

District maintenance personnel count the number of vehicles parked in each commuter lot in conjunction with the quarterly condition inspections. Data is collected from every district to create a statewide report. This measure is updated quarterly.

**Improvement Status:**

There was an increase in the number of available spaces and number of parked vehicles this quarter. One lot was closed in the Northwest District, one was reopened following construction in the Springfield District, one was reopened and one was added in the St. Louis District. The net increase of available spaces is 88. The number of available spaces statewide is now 6,376. The number of parked vehicles rose significantly to 2,960, up from 2,438 last quarter. To continue to encourage more commuters to use these lots, a plan was created to improve the condition and usage of these lots. Messages have been placed on the Interstate Dynamic Message Boards, the commuter lot webpage has been linked to MoDOT's homepage and the commuter lot webpage has been improved.



## Convenient, Clean and Safe Roadside Accommodations

### *Number of users of rest areas*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Stacy Armstrong, Roadside Management Supervisor

**Purpose of the Measure:**

This measure tracks the number of vehicles visiting rest areas. This information helps MoDOT better understand the peak days and times visitors use rest areas, impacting staffing decisions. MoDOT estimates the rest areas have more than 24 million visitors each year.

**Measurement and Data Collection:**

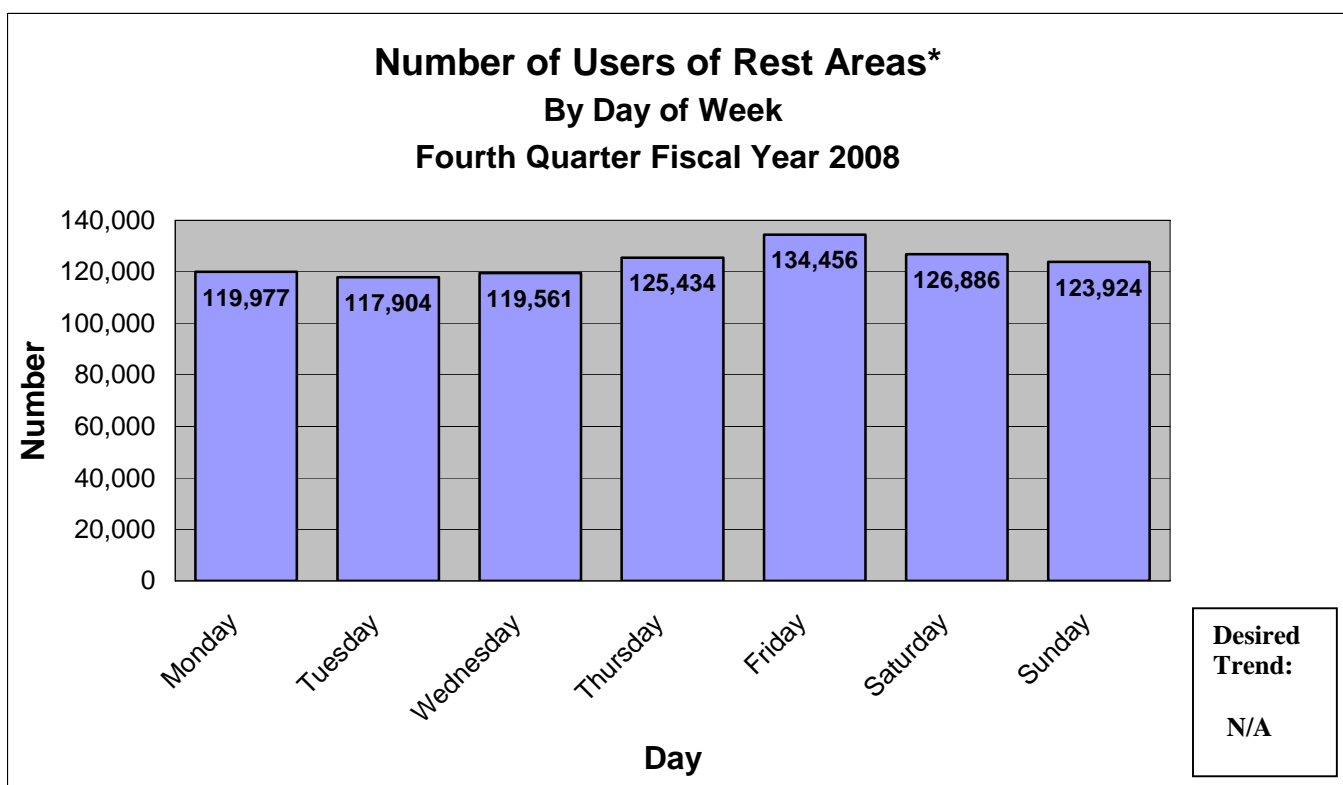
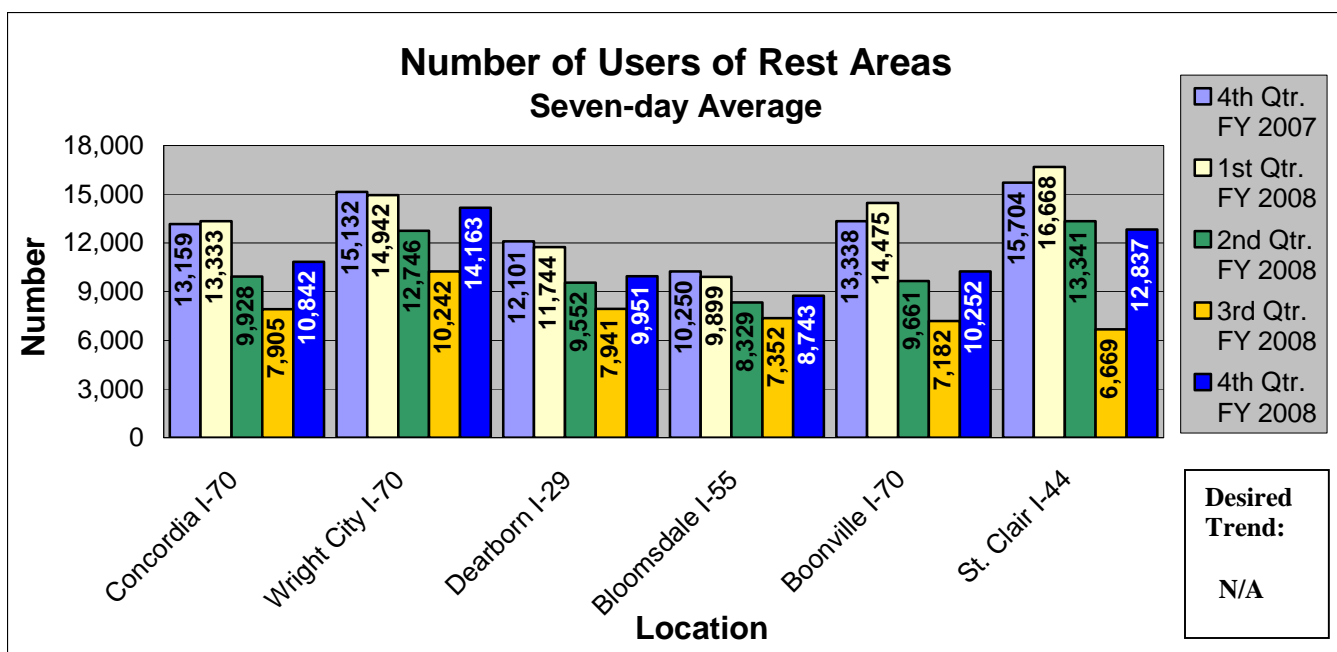
Rest areas at Bloomsdale on Interstate 55, Concordia on Interstate 70, Wright City on Interstate 70, Dearborn on Interstate 29, Boonville on Interstate 70 and St. Clair on Interstate 44 have permanent counters providing data daily. Pavement sensors send data from a solar-powered wireless transfer station. All permanent counter locations have two counters for a total of twelve counts. Five additional sites will have permanent counters installed in 2008. All data is from permanent counters. The counts are for the average seven-day period between April 1 and June 30. This data is updated quarterly.

**Improvement Status:**

The permanent counters installed at Rockport on Interstate 29 and Lathrop on Interstate 35 are experiencing data transfer problems. Permanent counters will be transferring data from 12 different rest areas starting July 2008.

The counting period includes the entire quarter for the six original sites. The number of users in the first graph is the weekly average for each of the six sites. The weekly average is lower than the same period last year and may be because of high fuel prices, resulting in fewer miles traveled. The weekly average is determined by adding the grand totals for each of the six sites for the quarter, dividing by the number of days in the quarter (91 for this quarter) and multiplying by seven for the weekly total.

The second graph provides the total number of visitors for the six sites for each individual day of the week of the quarter. Fridays still remain the busiest day at the rest areas.



\*Concordia, Wright City, Dearborn, Bloomsdale, Boonville and St. Clair



## Convenient, Clean and Safe Roadside Accommodations

### *Number of truck customers that utilize rest areas*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Tim Jackson, Maintenance Liaison Engineer

**Purpose of the Measure:**

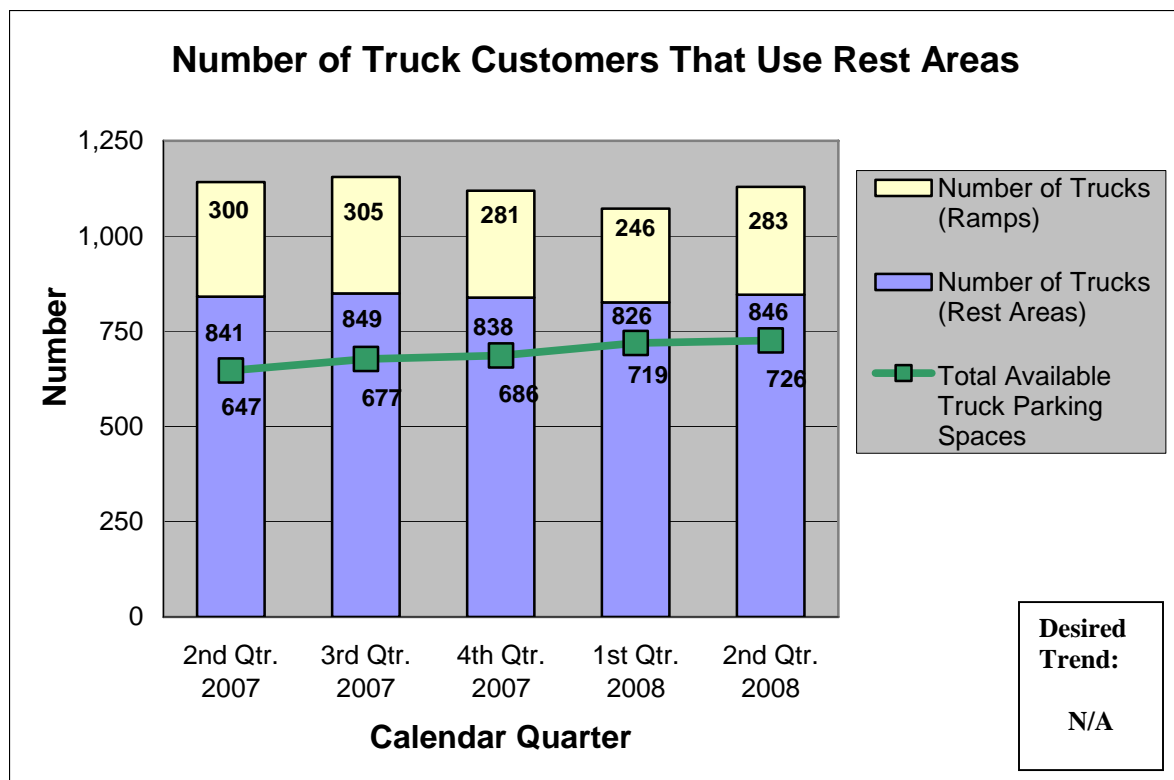
This measure tracks the number of trucks at rest areas, welcome centers and truck parking facilities. The number of trucks using the rest areas and the nearby ramps could be used to help determine how many spaces are needed to provide convenient parking facilities at each rest area.

**Measurement and Data Collection:**

On a monthly basis, district maintenance personnel count the number of trucks parked at welcome centers, rest areas, on nearby ramps within 15 miles of the welcome centers/rest areas and at abandoned weigh stations that have been converted to truck parking facilities. The count is done between 4 and 6 a.m., which is typically the busiest time. Data is collected from every rest area and truck parking facility to create a statewide report and updated quarterly.

**Improvement Status:**

The second quarter of calendar year 2008 showed an increase of 20 in the average number of trucks using the rest areas and other designated truck parking facilities from the previous quarter. The average number of trucks parked in these locations increased 5 from the second quarter of 2007, while the average number of truck parking spaces increased by 79 during the same time period. The Conway rest area closed in June for construction of a new welcome center, while a new truck parking facility at Strafford opened up this quarter. Constructing welcome centers with additional truck parking spaces and converting abandoned weigh stations into truck parking facilities continues to be a way to add parking spaces across the state to accommodate the need for additional truck parking.



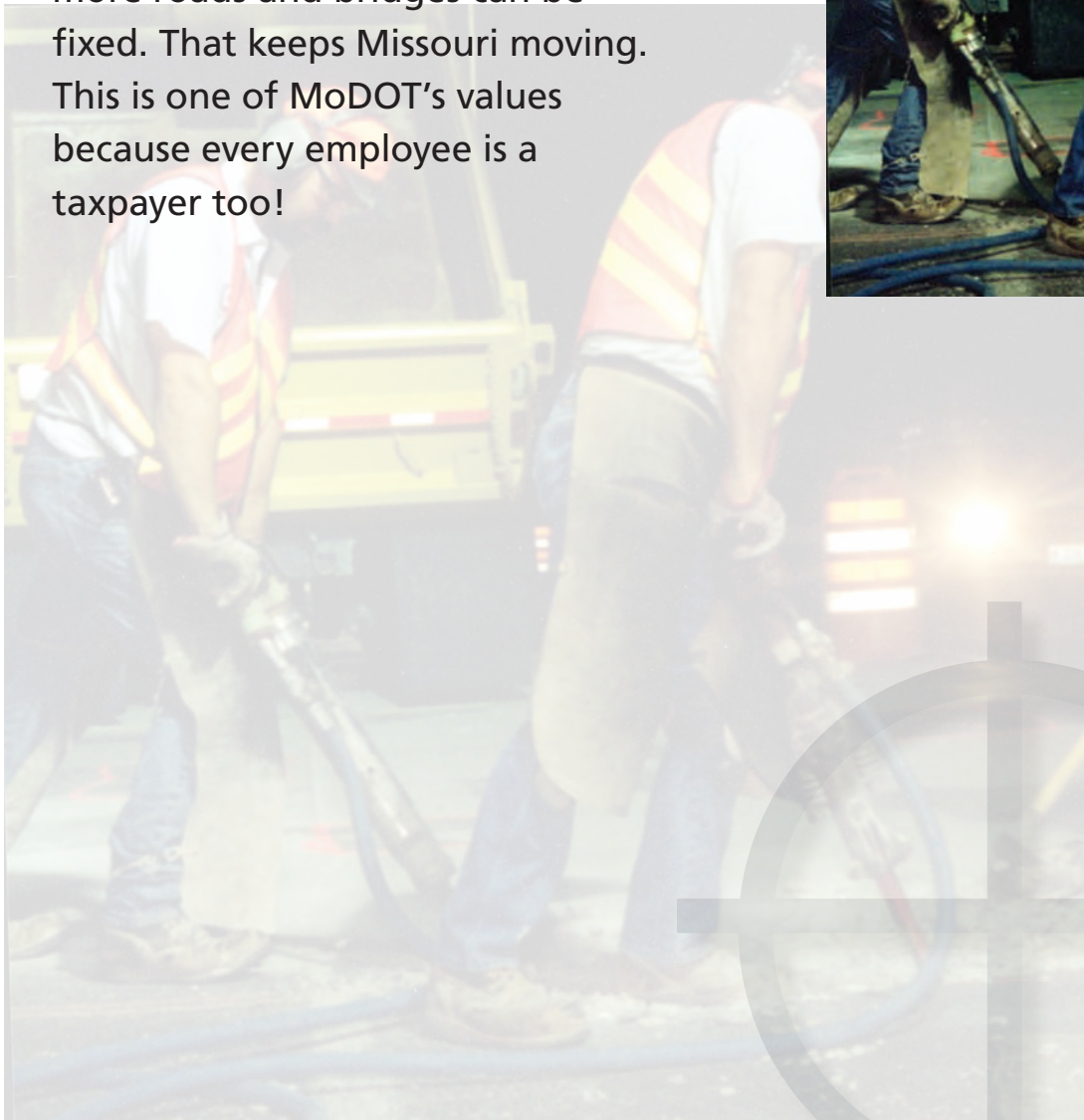
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# Best Value For Every Dollar Spent

*Tangible Result Driver – Roberta Broeker,  
Chief Financial Officer*

Providing the best value for every dollar spent means MoDOT is running its business as efficiently and effectively as possible. A tightly managed budget means more roads and bridges can be fixed. That keeps Missouri moving. This is one of MoDOT's values because every employee is a taxpayer too!



## Best Value for Every Dollar Spent

### *Number of MoDOT employees (converted to full-time equivalency)*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Micki Knudsen, Human Resources Director

**Purpose of the Measure:**

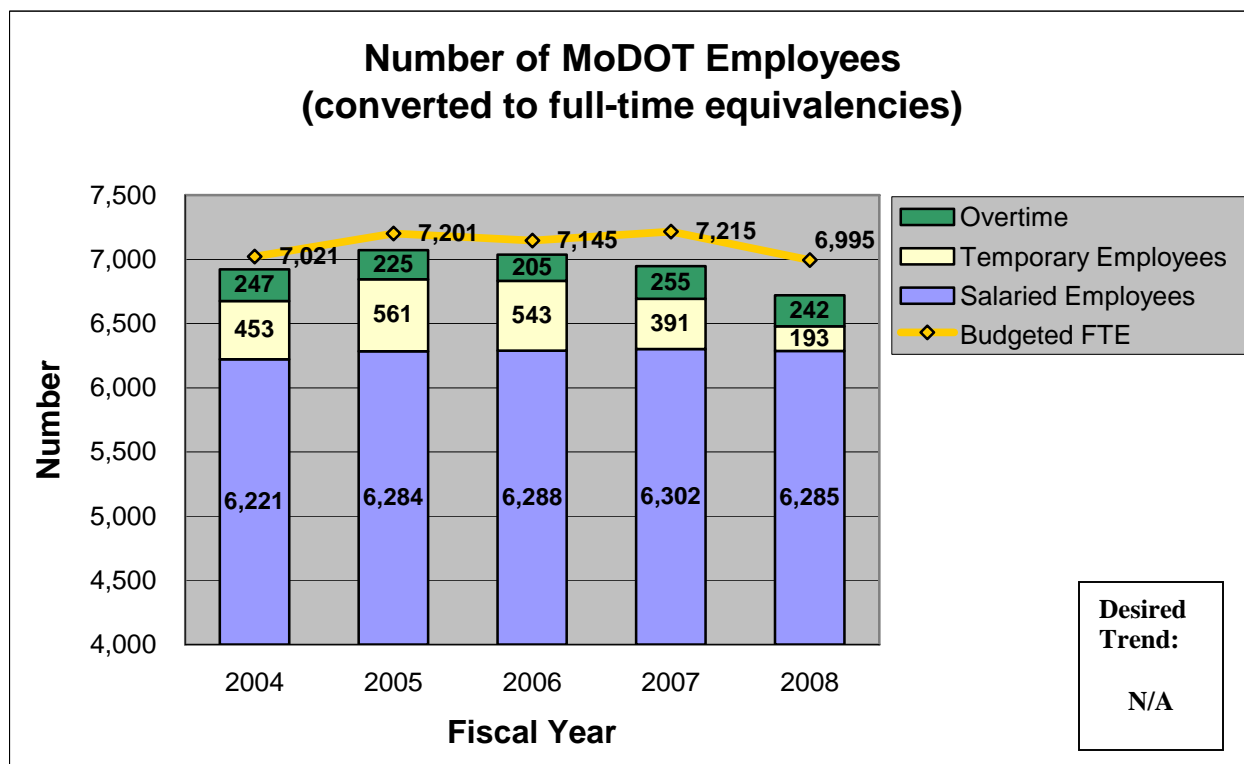
This measure tracks the change in the number of employees within the department. This measure converts salary dollars paid to temporary and salaried employees, as well as the amount paid for overtime worked, to full-time equivalency (FTE). In order to convert these numbers to FTEs, the total number of hours worked is divided by 2,080. Overtime includes both salaried and wage employees.

**Measurement and Data Collection:**

The data is collected and reported each quarter of the fiscal year. The data is a high-level view of overall staffing at MoDOT in relation to budgeted FTEs.

**Improvement Status:**

Comparing fiscal year 2008 to FY 2007, the department has used 17 fewer FTEs for salaried employees, 198 fewer FTEs for temporary employees, and 13 fewer FTEs for overtime. In terms of the actual number of employees, comparing 2008 to 2007, the department has reduced the number of salaried employees by 38 and the number of seasonal employees by 46. Reductions in the actual number of employees and FTEs are reflective of the department's emphasis on managing its staffing levels. The reduction in overtime worked is an outcome consistent with department efforts to better manage work schedules.



## Best Value for Every Dollar Spent

### *Percent of work capacity based on average hours worked*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Micki Knudsen, Human Resources Director

**Purpose of the Measure:**

The purpose of this measure is to track how many hours the average employee works on an annual basis. It can assist management in determining staffing and productivity levels.

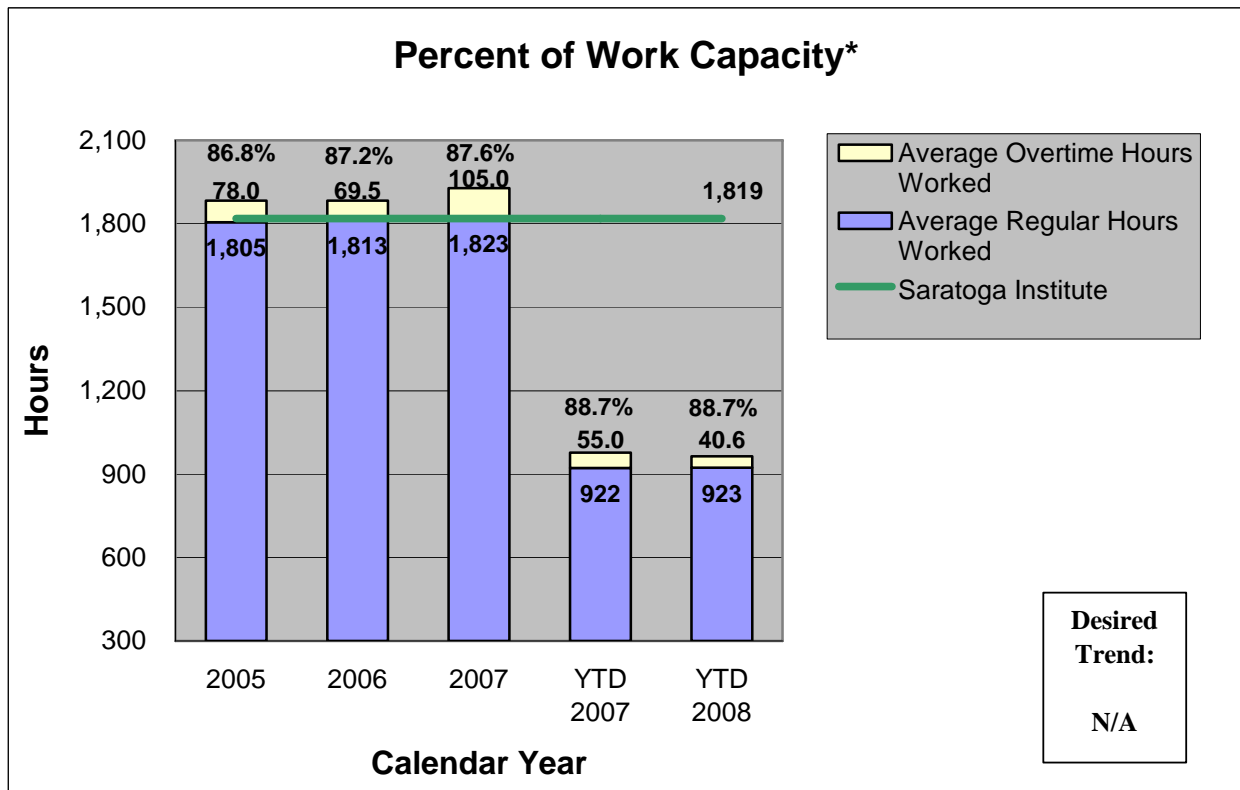
**Measurement and Data Collection:**

MoDOT measures organizational work capacity based on average regular hours worked and average overtime hours worked by employees. The chart also displays the percentage of regular hours available that are worked.

The average regular hours worked does not include seasonal or wage employees. The average overtime hours worked does not include exempt, seasonal, or wage employees. Benchmark data is from the Saratoga Institute report, "Key Trends in Human Capital – Global Perspective," indicating average hours worked per person in the United States.

**Improvement Status:**

Year-to-date work capacity for the calendar year 2008 remained the same compared to the same time frame for 2007, 88.7 percent. The most significant finding when comparing work capacity from the first half of 2008 to the first half of 2007 is the reduction in average overtime hours worked per employee, from 55.0 hours in 2007 to 40.6 hours in 2008. This is the result of the department's decision to focus on the reduction of overtime by sharing best practices in managing work schedules.



\* Based on 2,080 hours of work in the calendar year (520 hours in the quarter), not including overtime hours.

## Best Value for Every Dollar Spent

### *Rate of employee turnover*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Micki Knudsen, Human Resources Director

**Purpose of the Measure:**

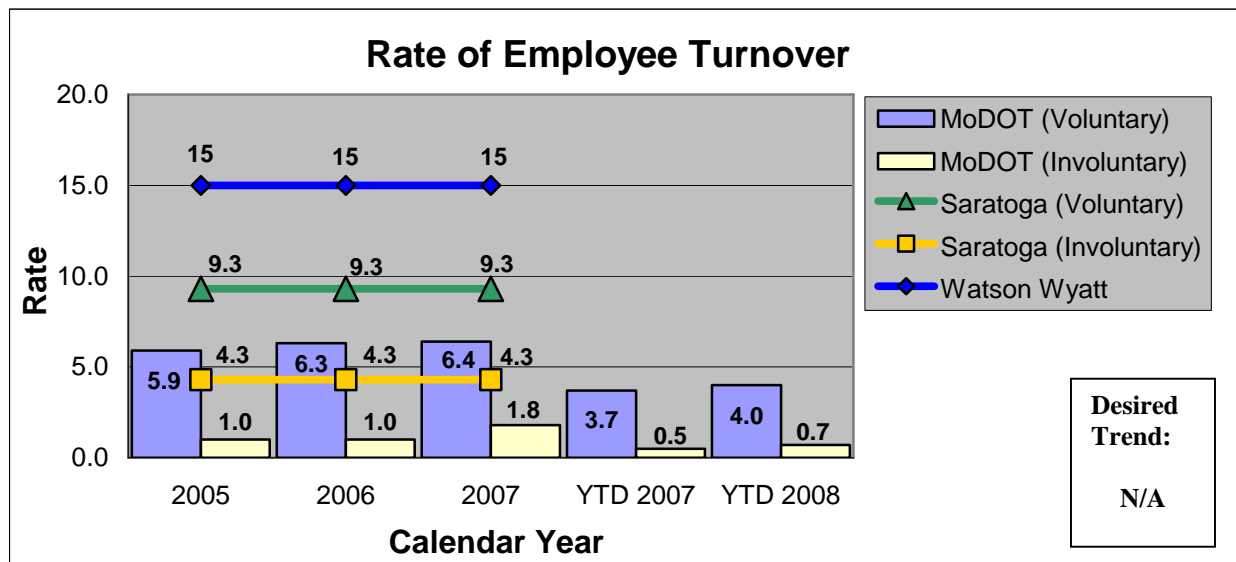
This measure tracks the percentage of employees who leave MoDOT annually and compares the department's turnover rate to benchmarked data. Voluntary turnover includes resignations and retirements. Involuntary turnover includes dismissals. Turnover rates include voluntary separations, involuntary separations, and deceased employees.

**Measurement and Data Collection:**

The data is collected statewide to assess employee overall turnover. Comparison data is collected from various sources annually. For benchmarked data, Saratoga Institute surveyed 288 organizations representing a wide variety of industries. In addition, the Watson Wyatt study determined the optimum turnover rate by analyzing turnover rate compared to organizational financial performance.

**Improvement Status:**

During the first half of calendar year 2008, there were 302 separations from the department. This compares to 271 and 253 for the first halves of 2007 and 2006, respectively. If the separation trend continues as it has in the previous two years, 2008 will have the highest separation rate since 2000. There were 43 involuntary separations during the first half of 2008 compared to 33 during the same period in 2007. This reflects an increase in involuntary turnover, which is considered positive for the organization as a result of the increased emphasis on performance management. Additionally, 30 of the 255 voluntary separations that occurred in the first half of 2008 are also considered positive turnover, due to the separating employee having a disciplinary history and/or a final performance management rating of "Needs Improvement" or below. The number of employees in civil engineering positions that left the department during the first half of 2008 (34) is the same as in the first half of 2007. Calendar year 2007 had the lowest civil engineering separation rate in the last three years.



## Best Value for Every Dollar Spent

### *Level of job satisfaction*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Micki Knudsen, Human Resources Director

**Purpose of the Measure:**

This measure tracks the level of employee satisfaction throughout the department at specific points in time. The first chart indicates the level of department employees' job satisfaction and changes in their satisfaction over time. The second chart shows the percentage of MoDOT employees who are satisfied compared to the organizations that scored the best in employee satisfaction using the same survey instrument, and to top-level organizations using a similar survey questionnaire.

**Measurement and Data Collection:**

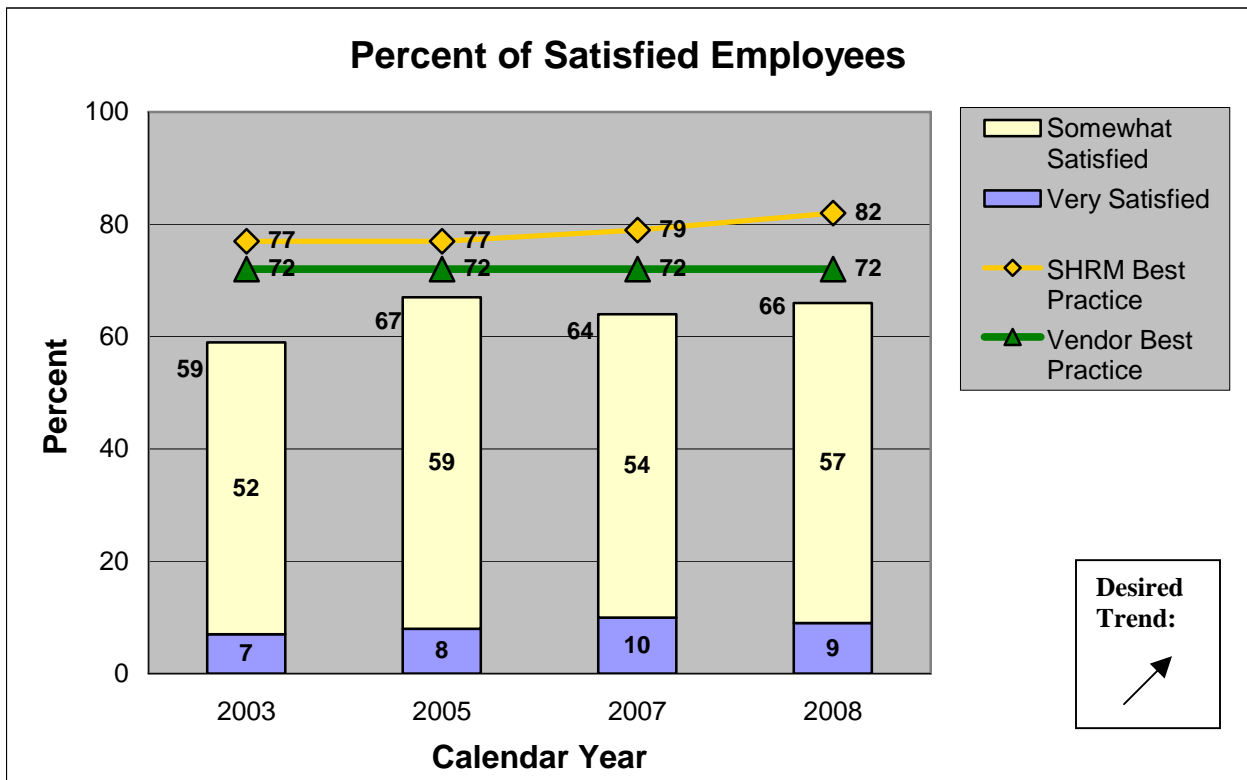
Employee satisfaction is measured using 18 items from an annual employee survey. The vendor contracted to conduct the employee satisfaction survey in 2003 and 2005 provided "Vendor Best Practice" data collected from an anonymous company. Society for Human Resources Management (SHRM) best practice data was gathered from a SHRM report of an annual job satisfaction survey of 55 Fortune 500 companies.

**Improvement Status:**

The 2008 Employee Satisfaction Survey was distributed on May 5, 2008, and preliminary data was analyzed beginning the week of June 16, 2008. An additional scale was added to the Employee Satisfaction Survey this year to measure employee perceptions about how supervisors, and/or MoDOT overall, live the MoDOT Values. A final report will be distributed in October 2008.

Results indicate that 4,209 employees responded to the survey for a 64 percent return rate. That is a decrease from 76 percent in 2007 and is below the 2005 rate of 70 percent. For 2008, a smaller percentage of employees rated their overall satisfaction at the highest level; however, a higher percentage of employees rated their overall satisfaction above neutral, 66 percent compared to 64 percent in 2007. The average rating for job satisfaction increased for 2008. Of the 18 items comprising the job satisfaction scale, 14 items increased in average score and 2 remained unchanged. The two items related to "general satisfaction" and "feeling in control of life while at work" decreased. The two items related to "rewards at work" had the largest average increase; however, both are still among the bottom three ranked items in the job satisfaction scale. These results coincide with a significant number of comments and concerns related to pay issues including: (1) restriction on working overtime, (2) concerns about favoritism in performance-based pay increases, (3) lack of opportunities for promotion, and (4) pay increases not keeping up with rising costs of living. Additionally, concerns about employee morale comprise a significant portion of employee comments.

The 2007 Employee Satisfaction Survey report included 41 strategies to improve employee satisfaction. The district management teams and executive management at Central Office developed these strategies for implementation during fiscal year 2008. The districts and divisions have been contacted to determine the status of the strategies. The results of the survey seem to indicate these strategies have produced mixed results as both the job satisfaction and organizational justice scales increased on average, while the employee engagement scale has decreased.





## Best Value for Every Dollar Spent

### *Number of lost workdays per year*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jeff Padgett, Risk and Benefits Management Director

**Purpose of the Measure:**

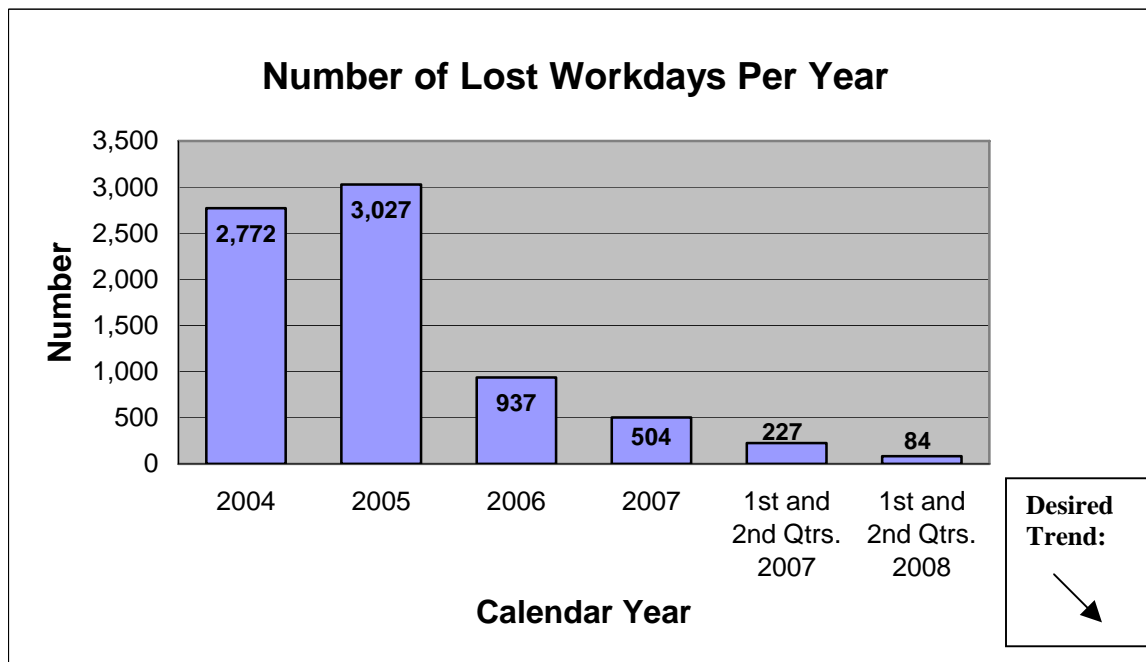
This measure tracks the actual number of days that employees cannot work due to work-related injuries sustained during the reporting period. Note that the results do not include lost workdays for injuries that occurred during previous reporting periods. (Example: an employee that is injured on Dec. 31, 2007 and is off during January of 2008 will not show up as lost time in 2008 because the incident occurred during the previous reporting period.)

**Measurement and Data Collection:**

The data is collected from Riskmaster, a claims administration software, and reported quarterly.

**Improvement Status:**

The number of lost workdays for the first and second quarters of 2008 is 63 percent lower than the total from the same period last year, declining from 227 in 2007 to 84 lost workdays in 2008. Though not illustrated in the chart, the number of lost-time incidents reflected a 22 percent reduction from 2007 to 2008. MoDOT suffered the loss of two employees during the first two quarters of 2008. Springfield Area had an employee who was fatally injured in March, and the Kansas City Area had an employee who was fatally injured in June. MoDOT continues to develop and implement new safety-related initiatives to further reduce lost workdays including the Performance Plus Injury Reduction Incentive, a work simulation physical exam and a fitness for duty program. Risk management personnel now direct all medical care for work-related injuries. MoDOT continues to identify and provide light-duty assignments for injured workers with restrictions in an effort to get them back to work quickly.



## Best Value for Every Dollar Spent

### *Rate and total of OSHA recordable incidents*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jeff Padgett, Risk and Benefits Management Director

**Purpose of the Measure:**

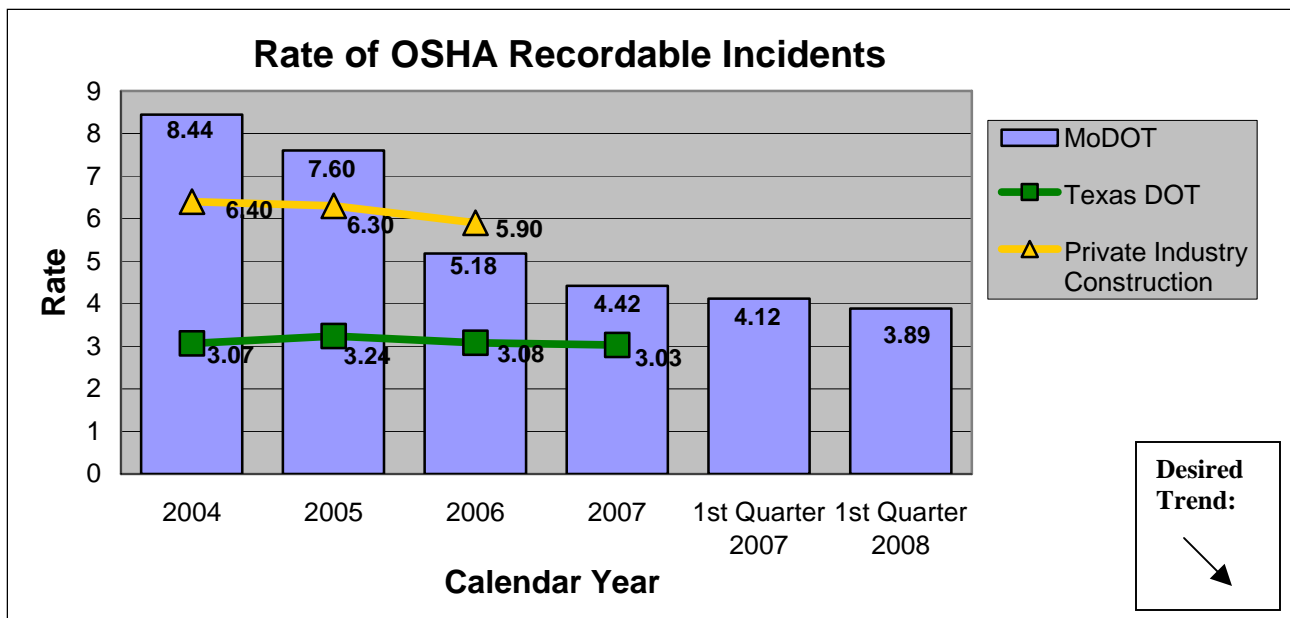
This measure tracks the number of recordable injuries, as defined by OSHA, in total and as a rate of injuries per 100 workers. The calculation for incidence rate is the number of recordables times 200,000 divided by the number of hours worked. The 200,000 used in the calculation is the base for 100 full-time workers (working 40 hours per week, 50 weeks per year). OSHA defines a recordable incident as a work-related injury or illness that results in death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid or loss of consciousness. MoDOT defines medical treatment beyond first aid as work-related injuries requiring two or more doctor visits.

**Measurement and Data Collection:**

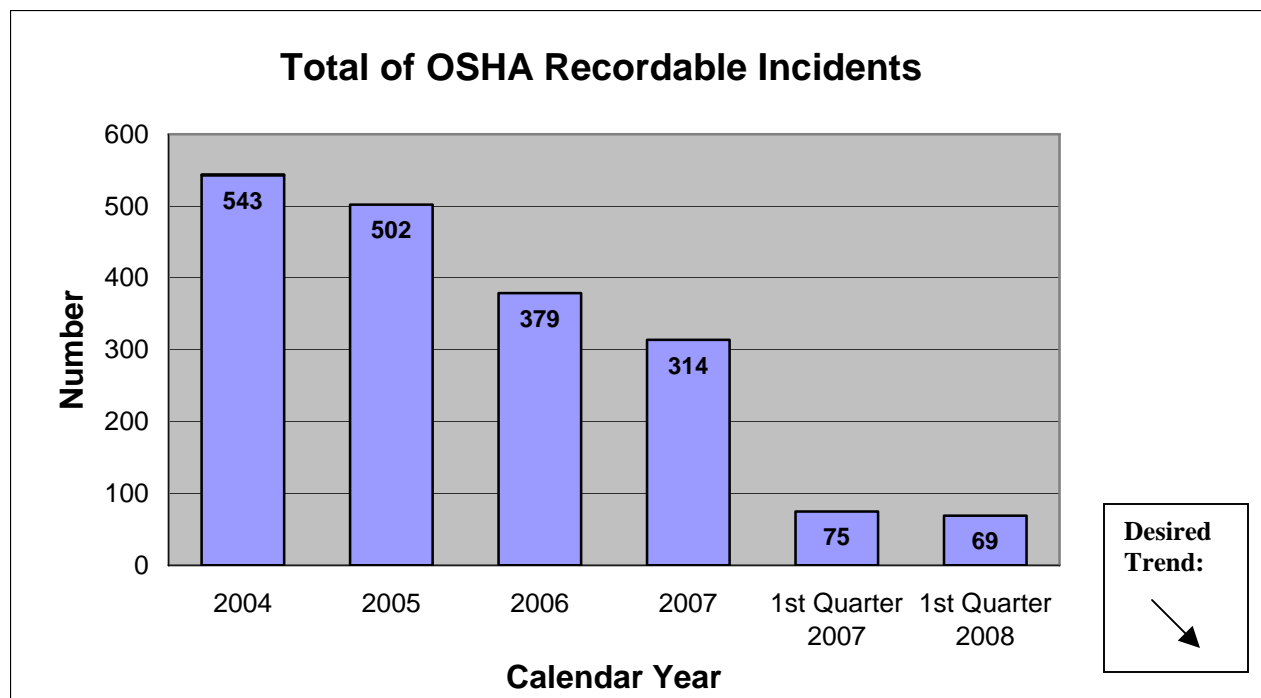
MoDOT reports on the measure quarterly, one quarter in arrears, and collects the injury data from Riskmaster, a claims administration software. The number of hours worked is taken from MoDOT's payroll data.

**Improvement Status:**

Both the number of OSHA recordables and the incidence rate for MoDOT have declined over the reporting periods noted. The incident rate declined by 6 percent for 2008 over 2007, dropping from 4.12 to 3.89. The number of OSHA recordables declined by 8 percent over the same period, demonstrating a reduction from 75 to 69. The department has reduced its injury rate by successfully implementing numerous safety-related initiatives.



(Information from Private Industry Construction was not yet available for 2007.)



## Best Value for Every Dollar Spent

### *Number of claims and total claims expense for general liability*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jeff Padgett, Risk and Benefits Management Director

**Purpose of the Measure:**

General liability claims arise from allegations of injuries/damages caused by the dangerous condition of MoDOT property and the injury/damage directly resulted from the dangerous condition. In addition, an employee must be negligent and create the dangerous condition or MoDOT must have actual or constructive notice of the dangerous condition in sufficient time prior to the injury/damage to have taken measures to protect the public against the dangerous condition. This measure tracks the number of general liability claims filed and claims expense incurred during the reporting period. The claims expense includes cash paid and adjustments to claim reserves.

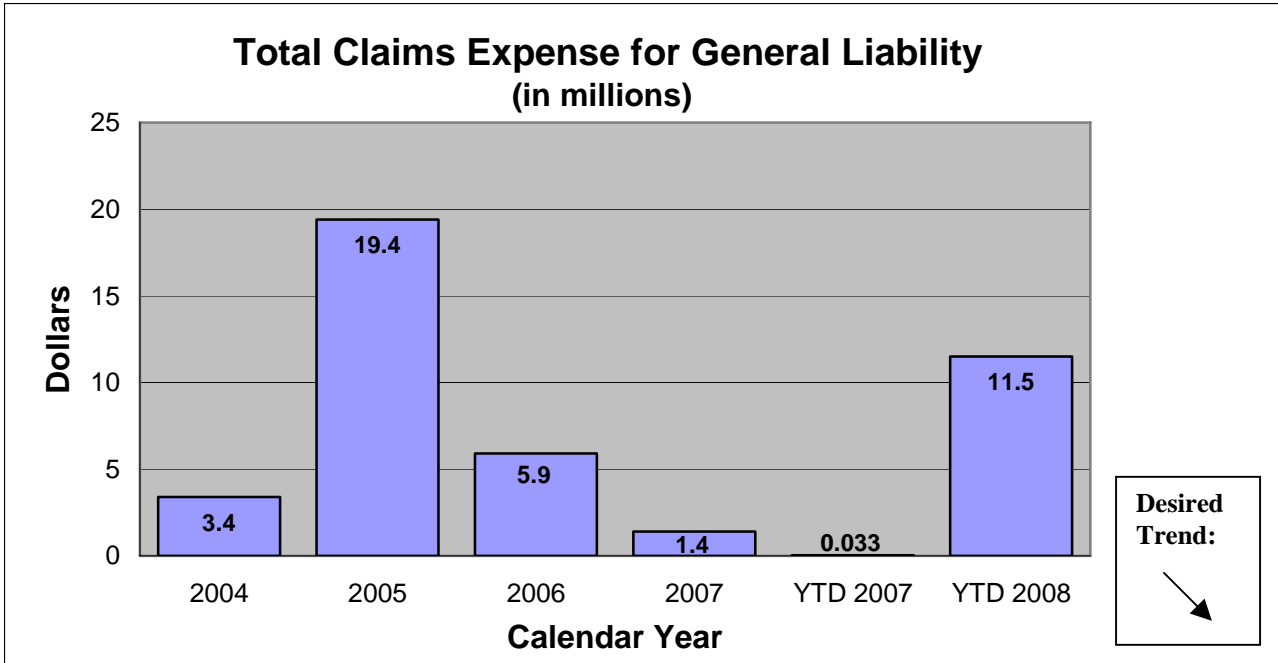
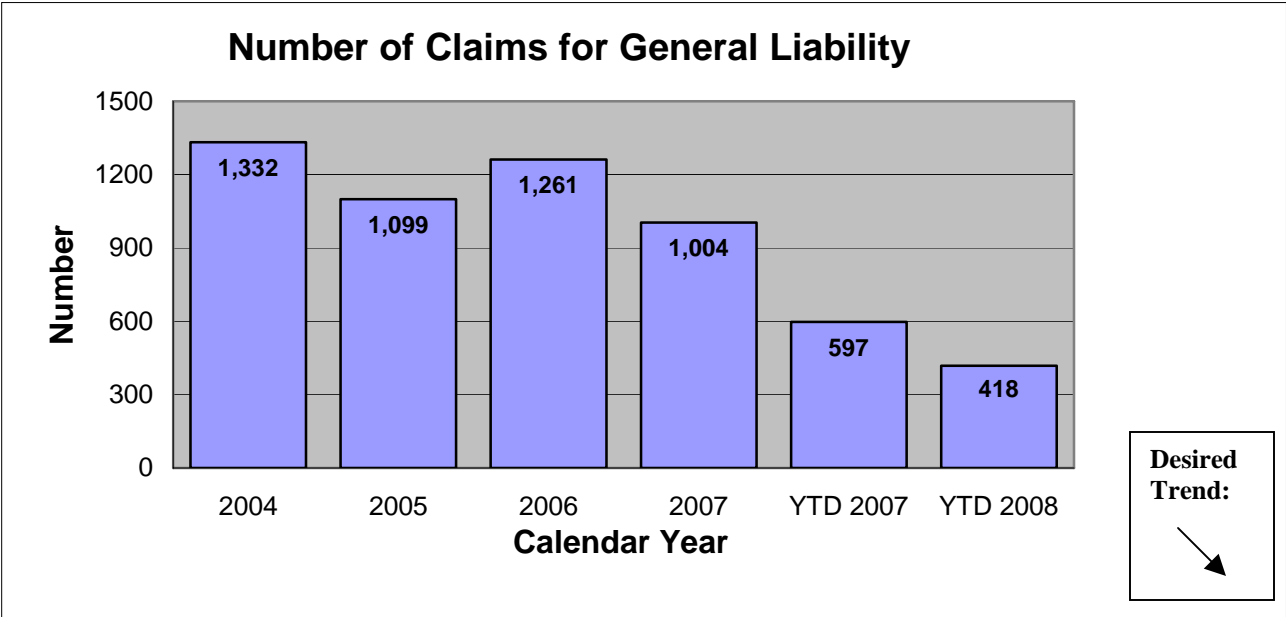
**Measurement and Data Collection:**

Risk and Benefits Management reports on the measure quarterly and collects the claims data from Riskmaster, a claims administration software. The Controller's Division provides the claims expense in the self-insurance plan financial statements.

**Improvement Status:**

The number of claims for general liability has declined over the reporting periods noted. The number of claims has declined by 30 percent through 2008 over the same time period in 2007, dropping from 597 to 418.

The actual claims expenses for the current period have increased significantly due to several adverse arbitration awards. The substantial increase in claims expense for 2005 is due to MoDOT receiving approximately 70 additional lawsuits immediately prior to the effective date of tort reform legislation. The expense represents the best estimate of the future liability attached to each claim and is adjusted over the life of the claims. Recently filed lawsuits and adjustments to pending reserves account for 90 percent of the expenses. The remaining 10 percent reflects payments.



## Best Value for Every Dollar Spent

### *Cost of utilities for facilities*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Doug Record, General Services Manager - Facilities

**Purpose of the Measure:**

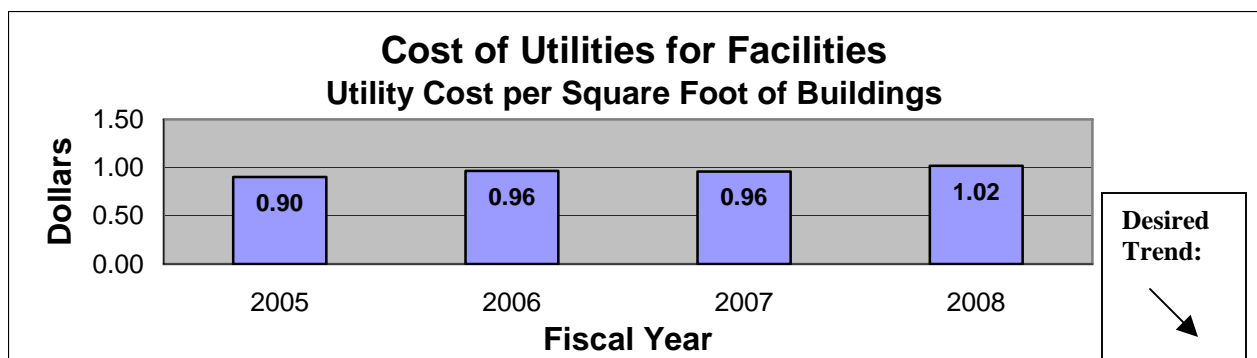
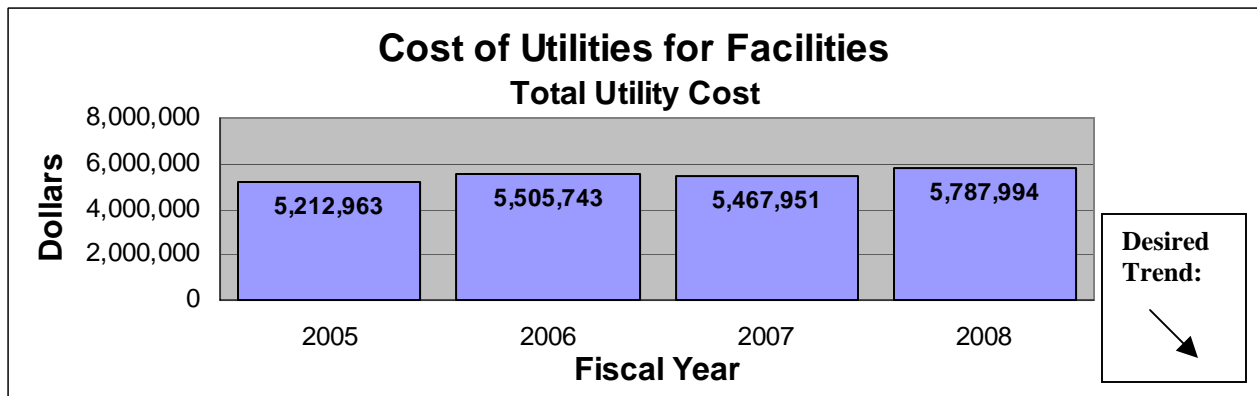
This measure tracks the cost of utilities for department facilities, excluding roadways. It focuses on how these costs are affected by energy efficient improvements in buildings and operations.

**Measurement and Data Collection:**

The data is collected based on utility expenditures recorded in the statewide financial accounting system. The following expenditures are included in the analysis: Electricity, excluding roadways, lighting & signals, Steam, Water, Sewer, Natural Gas, Propane, Fuel Oil, Other Fuel & Utilities. This is a quarterly measure with the per square foot chart being updated annually.

**Improvement Status:**

In 2008, the total costs reported for utilities was \$5,864,214, an increase of 5.8 percent of the total utility costs reported in 2007. In the square foot cost comparison costs increased from 0.96 to 1.02, a 6.2 percent increase. Gas expenditures had the highest increase at 10.95 percent over last year. Per national reports from July 2007 to April 2008, gas prices increased on average 7 percent. Electric expenditures increased 2.34 percent over 2007, with national reports indicating an average 3 percent increase. Energy efficient improvements, such as lighting, sensors, programmable thermostats, etc, continue to be a statewide focus. To help with the physical improvements an initiative has been rolled out statewide to encourage employees to be more energy efficient in MoDOT's operations. A web page and blog have also been set up for employees to share energy saving ideas.



## Best Value for Every Dollar Spent

### *Fleet status*

**Result Driver:** Roberta Broecker, Chief Financial Officer

**Measurement Driver:** Jeannie Wilson, Central Office General Services Manager

**Purpose of the Measure:**

This measure tracks the number of units in the MoDOT fleet as well as their condition. The chart provides an overall fleet condition status based on actual fleet age and meter compared to maximum life-cycle thresholds.

**Measurement and Data Collection:**

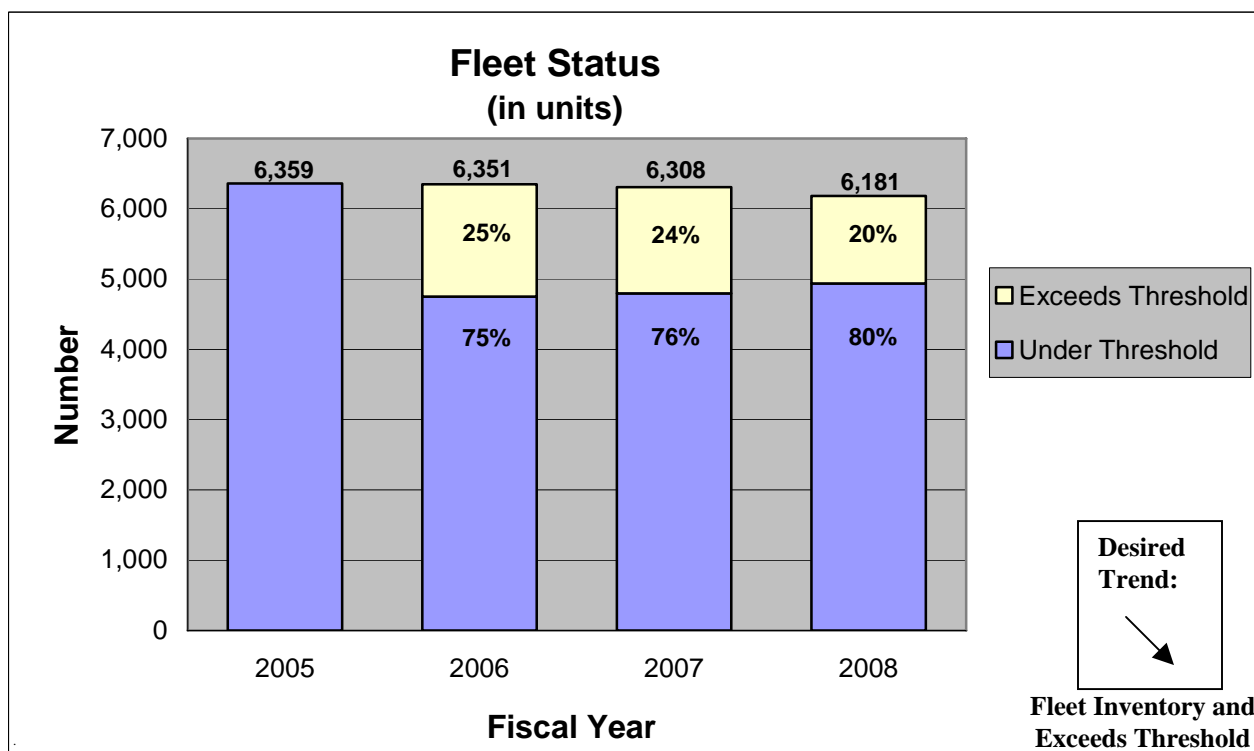
Age and meter thresholds were established based on maximum life usefulness. Units are identified as either exceeding or not exceeding their primary life cycle for either age or meter.

Reports are generated from the Fleet Management System to obtain information regarding equipment age and usage.

**Improvement Status:**

The overall fleet size has decreased from 6,308 to 6,181 units during fiscal year 2008.

MoDOT's goal is to increase the percentage of fleet under the replacement threshold. According to the established thresholds, 80 percent of the MoDOT fleet is under the recommended replacement criteria. The criteria suggests that 20 percent of the fleet currently meets or exceeds the threshold. MoDOT has made a concerted effort to maintain the fleet at the appropriate level to ensure service needs are met.



## Best Value for Every Dollar Spent

### *Percent of vendor invoices paid on time*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Debbie Rickard, Controller

**Purpose of the Measure:**

This measure tracks the department's timeliness in processing vendor payments.

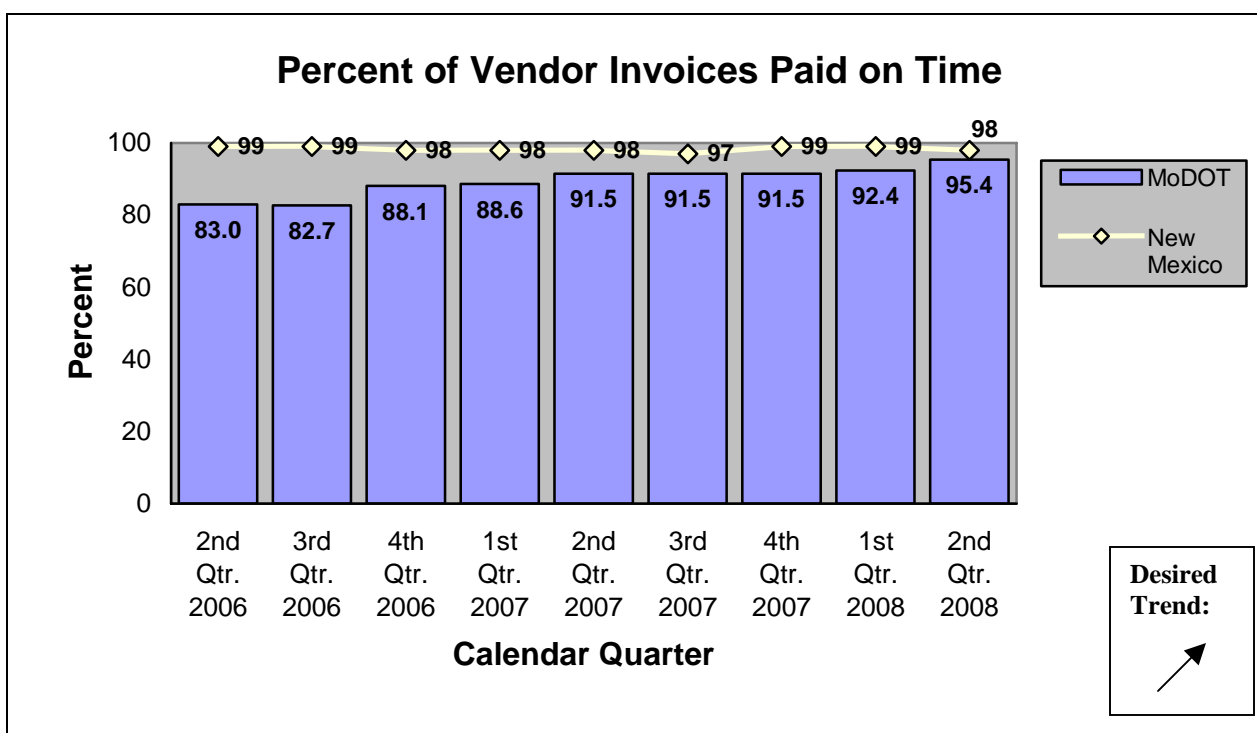
**Measurement and Data Collection:**

The check date determines if invoice payment is timely. Timely is defined as a check issued less than 31 days from the date of the invoice. The department's measure is benchmarked to the New Mexico DOT. MoDOT uses the vendor invoice date for determining promptness of payment; New Mexico utilizes a combination of vendor invoice date and the date received by the approving division when the invoice has not been promptly delivered.

**Improvement Status:**

Vendors age their receivables based on the date of invoice. This measure indicates there has been consistent improvement. The steps to further improve are: (1) identify specific vendors experiencing delayed payment and work with those vendors to obtain timely, accurate invoices, (2) determine if delayed payments are common to a particular division within the Central Office or a district, (3) identify processes contributing to the delayed payment, and (4) identify innovative solutions to receive invoices from the customer.

Analysis tools have been developed to assist in identifying areas where improvements can be made.





## Best Value for Every Dollar Spent

### *Distribution of expenditures*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Debbie Rickard, Controller

**Purpose of the Measure:**

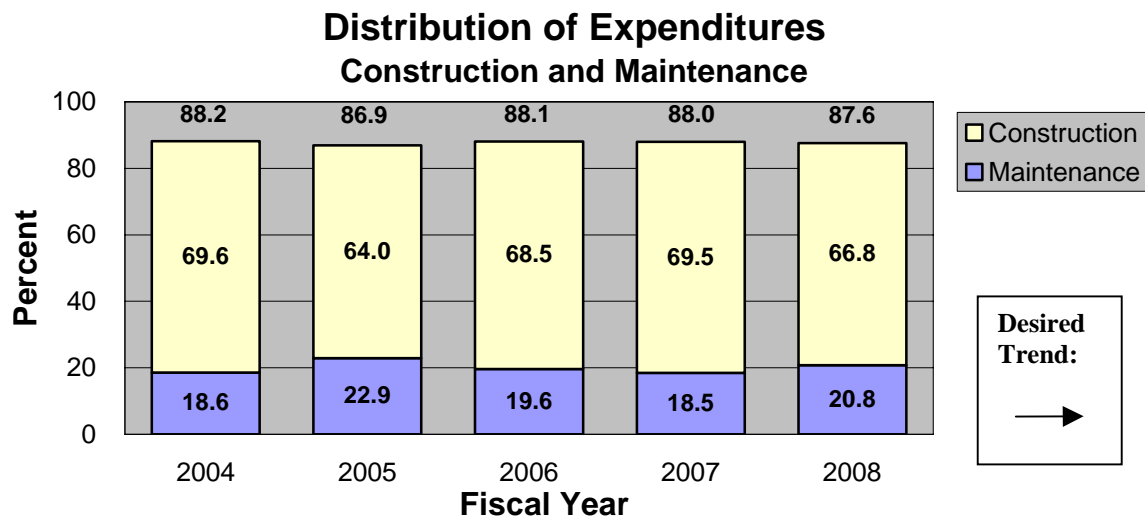
The purpose of the measure is to demonstrate a responsible use of taxpayers' money, with the emphasis of spending on the construction and maintenance of our transportation system.

**Measurement and Data Collection:**

The data collection is based on cash expenditures by appropriation on a quarterly basis. Construction and maintenance expenditures are defined as expenditures from the construction and maintenance appropriations. Other expenditures include: administration, multimodal, fleet, facilities, information systems, and other services (FFIS & Other), Motor Carrier and Highway Safety appropriations.

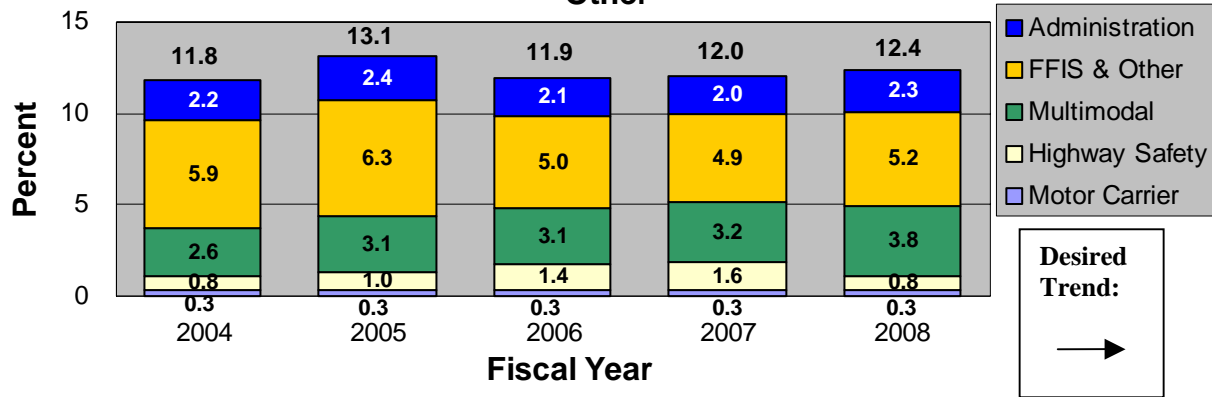
**Improvement Status:**

MoDOT's emphasis is on expenditures for routine maintenance of the system (maintenance appropriation) and rehabilitation and construction of the system (construction appropriation). Total expenditures are \$159.1 million less for Fiscal Year 2008 than for Fiscal Year 2007. Construction expenditures have decreased for the same period, percentage and dollars, as a result of reduced bond proceeds and a reduced construction program. Administration, FFIS, and Motor Carrier remain relatively constant as a percent of total expenditures, consistent with the desired trend. Highway Safety and multimodal fluctuate depending on availability of federal grants.



	Thousands of Dollars				
	2004	2005	2006	2007	2008
<b>Construction</b>	\$1,247,541	\$ 1,085,840	\$1,373,699	\$1,539,217	\$1,373,682
<b>Maintenance</b>	\$ 333,361	\$ 386,399	\$ 391,817	\$ 408,904	\$ 428,461

## Distribution of Expenditures Other



	Thousands of Dollars				
	2004	2005	2006	2007	2008
<b>Administration</b>	\$ 40,486	\$ 41,288	\$ 43,076	\$ 45,086	\$ 46,808
<b>Multimodal</b>	\$ 46,741	\$ 52,681	\$ 61,431	\$ 71,839	\$ 77,265
<b>FFIS &amp; Other</b>	\$ 105,130	\$ 106,822	\$ 99,418	\$ 108,023	\$ 106,343
<b>Motor Carrier</b>	\$ 5,035	\$ 5,811	\$ 6,741	\$ 6,899	\$ 6,930
<b>Highway Safety</b>	\$ 14,673	\$ 17,702	\$ 27,657	\$ 35,730	\$ 17,064

## Best Value for Every Dollar Spent

### *Percent variance of state revenue projections*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Ben Reeser, Finance Manager

**Purpose of the Measure:**

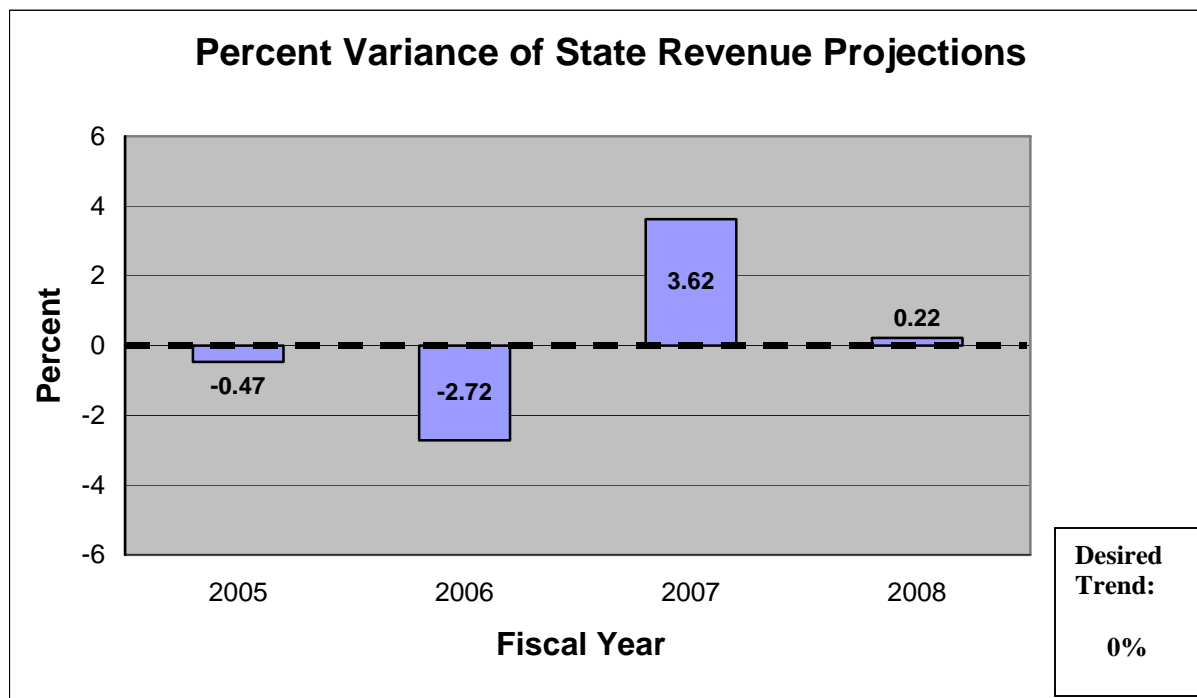
The measure shows the precision of state revenue projections. Projections are used to prepare the budget that funds MoDOT's operations and capital program.

**Measurement and Data Collection:**

State revenue includes three major components of taxes and fees paid by highway users: motor fuel taxes, motor vehicle and driver licensing fees, and motor vehicle sales and use taxes. This measure does not include interest earnings and miscellaneous revenue, which are also considered state revenues. The measure provides the cumulative, year-to-date percent variance of actual state revenue versus projected state revenue. Fiscal year 2008 projections are based on the current financial forecast. The forecast is updated at the beginning of each fiscal year. This measure is updated quarterly.

**Improvement Status:**

The actual state revenue was greater than projected through the fourth quarter of FY 2008. The projected revenue was \$1,047.4 million. However, the actual receipts were \$1,049.7 million, a difference of \$2.3 million and a positive variance of 0.22 percent. The desired trend is for the actual revenue to match projections with no variance. MoDOT staff adjusts future operating and capital budgets to account for these variances.



## Best Value for Every Dollar Spent

### *MoDOT national ranking in revenue per mile*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Ben Reeser, Finance Manager

**Purpose of the Measure:**

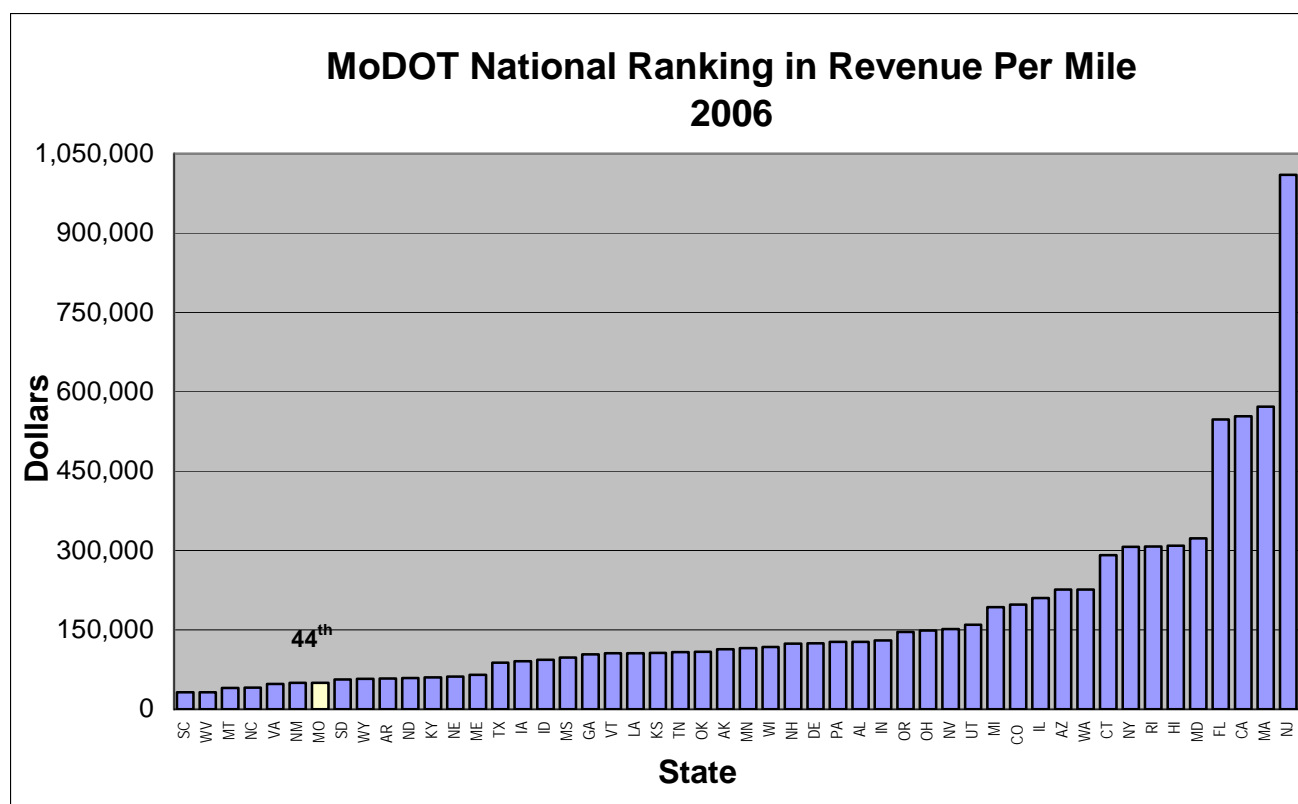
This measure shows Missouri's national ranking in the amount of revenue per mile that is available to spend on the state highway system.

**Measurement and Data Collection:**

Revenue is the total receipts less bonds as reported in the Federal Highway Administration's 2006 annual highway statistics report entitled "Revenues Used By States For State-Administered Highways." The mileage is the state highway agency miles as reported in the Federal Highway Administration's 2006 annual highway statistics report entitled "State Highway Agency-Owned Public Roads." Resource Management collects this information from the Federal Highway Administration. This measure is updated annually.

**Improvement Status:**

Missouri's revenue per mile of \$49,977 currently ranks 44<sup>th</sup> in the nation. Missouri has a very large state highway system, consisting of 33,681 miles, which is the seventh largest system in the nation. New Jersey's revenue per mile of \$1,010,172 ranks first. However, its state highway system contains only 2,326 miles. MoDOT staff continues to communicate the need for additional transportation funding to the public. Missouri's transportation needs greatly exceed current available funding.



## Best Value for Every Dollar Spent

### *Number of excess properties conveyed*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Kelly Lucas, Right of Way Director

**Purpose of the Measure:**

The purpose of this measure is to track the number of excess parcels conveyed from MHTC ownership. In order to fulfill its stewardship role of asset management, while observing practical business decisions, the department is proactively identifying and disposing of property that is no longer needed for the maintenance of the transportation system, will not be used for future expansion projects and is no longer needed for its operations.

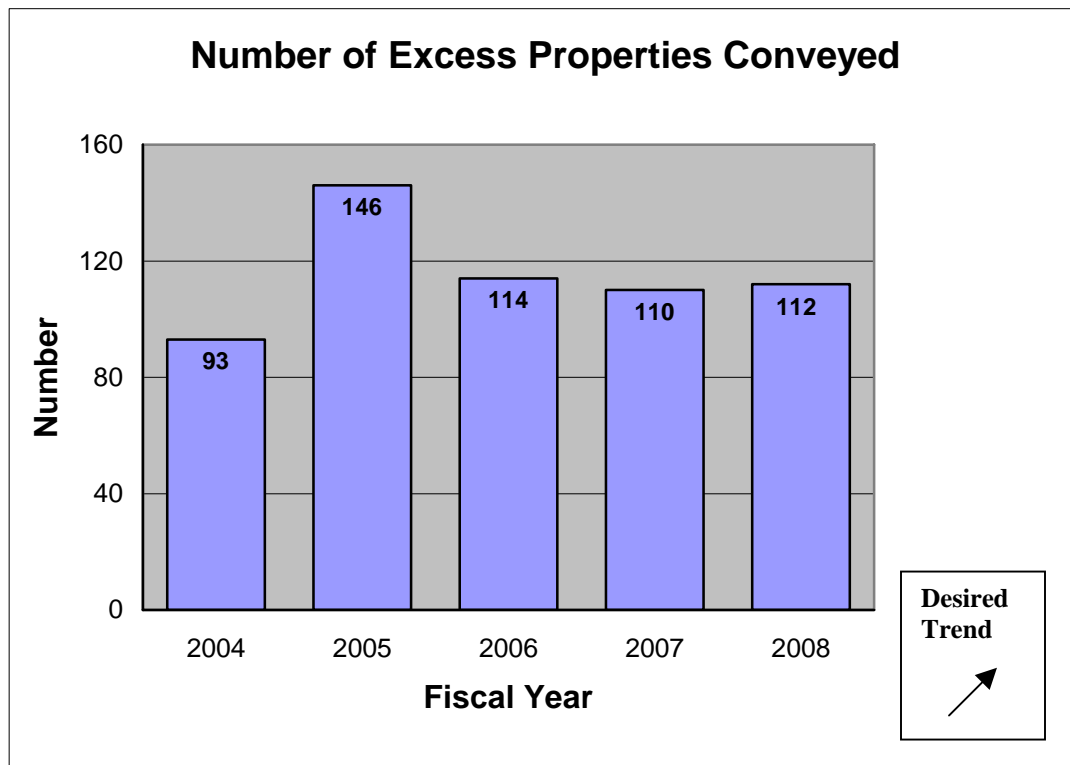
**Measurement and Data Collection:**

Data collection for this measure is reported on a quarterly basis from the Realty Asset Inventory system.

**Improvement Status:**

The chart shows the number of excess properties conveyed. Total conveyances for fiscal year 2008 were 112. This compares to 110 in FY 2007 and 114 in FY 2006. The chart demonstrates that the number of parcels conveyed has remained relatively constant for the last three years.

In order to elevate MoDOT's priority to reduce the excess inventory, guidelines were implemented in March 2008 requiring an annual review of all excess properties owned and an annual work plan identifying the priority parcels to be marketed for sale in the upcoming year. The priority was again elevated at the Right of Way Managers' Meeting in May 2008 by way of discussion and emphasis on delivering results.



## Best Value for Every Dollar Spent

### *Revenue generated from excess properties sold*

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Kelly Lucas, Right of Way Director

**Purpose of the Measure:**

The purpose of this measure is to track the amount of revenue generated from the sale of excess property. In order to fulfill its stewardship role of asset management, while observing practical business decisions, the department is proactively identifying and disposing of property that is no longer needed for the maintenance of the transportation system, will not be used for future expansion projects and is no longer needed for its operations. Funds received from the sale of excess properties are used to improve the condition of the state highway system. The districts use these funds to apply toward the costs associated with various maintenance activities and construction projects.

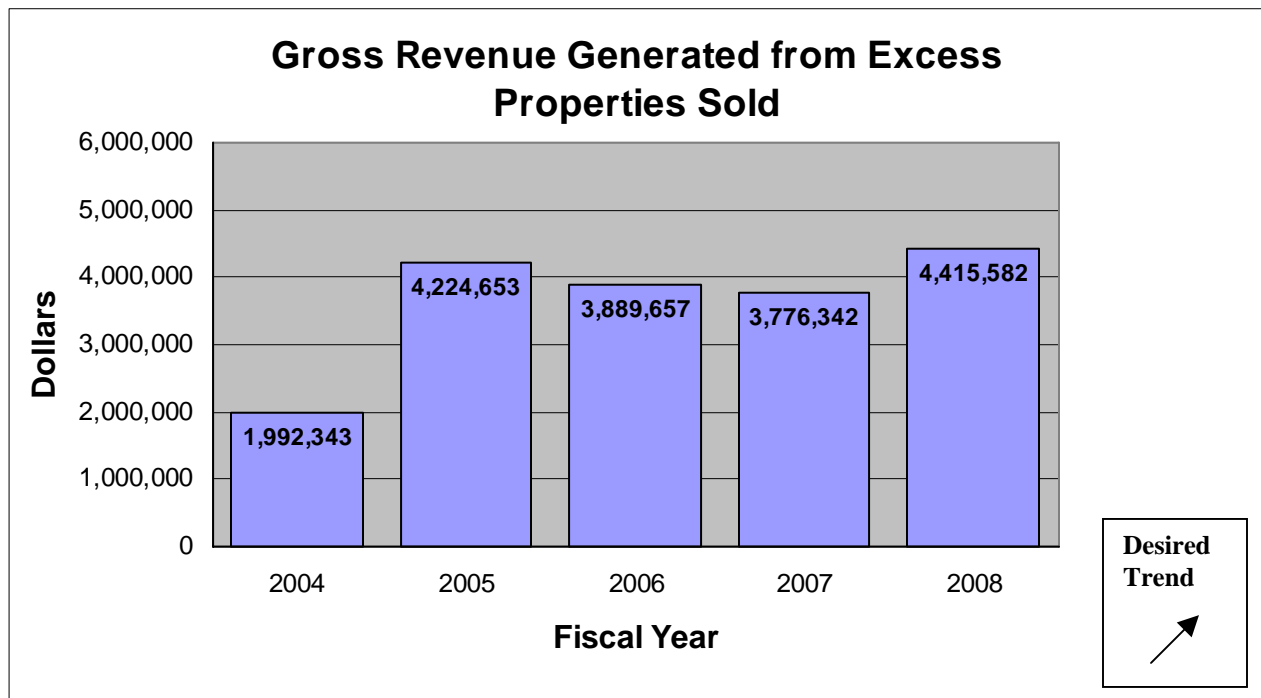
**Measurement and Data Collection:**

This data represents the gross revenue from all properties sold. Incidental costs incurred in the conveyance of excess properties are not considered in this measure. Data collection for this measure is reported on a quarterly basis from the Realty Asset Inventory system.

**Improvement Status:**

The chart shows the amount of gross revenue generated from the sale of excess parcels. Total revenue for fiscal year 2008 was \$4,415,582. This compares to \$3,776,342 in FY 2007 and \$3,889,657 in FY 2006.

In order to elevate MoDOT's priority to reduce the excess inventory, guidelines were implemented in March 2008 requiring an annual review of all excess properties owned and an annual work plan identifying the priority parcels to be marketed for sale in the upcoming year. The priority was again elevated at the Right of Way Managers' Meeting in May 2008 by way of discussion and emphasis on delivering results.



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# Attractive Roadsides

*Tangible Result Driver – Don Hillis,  
Director of System Management*

An enjoyable transportation experience includes more than a smooth surface – motorists expect to see roadsides free of litter and debris, well-managed and maintained grass and other vegetation and other attractive enhancements. MoDOT works to meet and exceed expectations for roadsides. Beautiful roadsides are visible proof that MoDOT takes pride in everything it does.



## Attractive Roadsides

### *Percent of roadsides that meet customers' expectations*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Jim Carney, State Maintenance Engineer

**Purpose of the Measure:**

This measure tracks the percent of MoDOT's roadway system that meets customers' expectations for attractiveness.

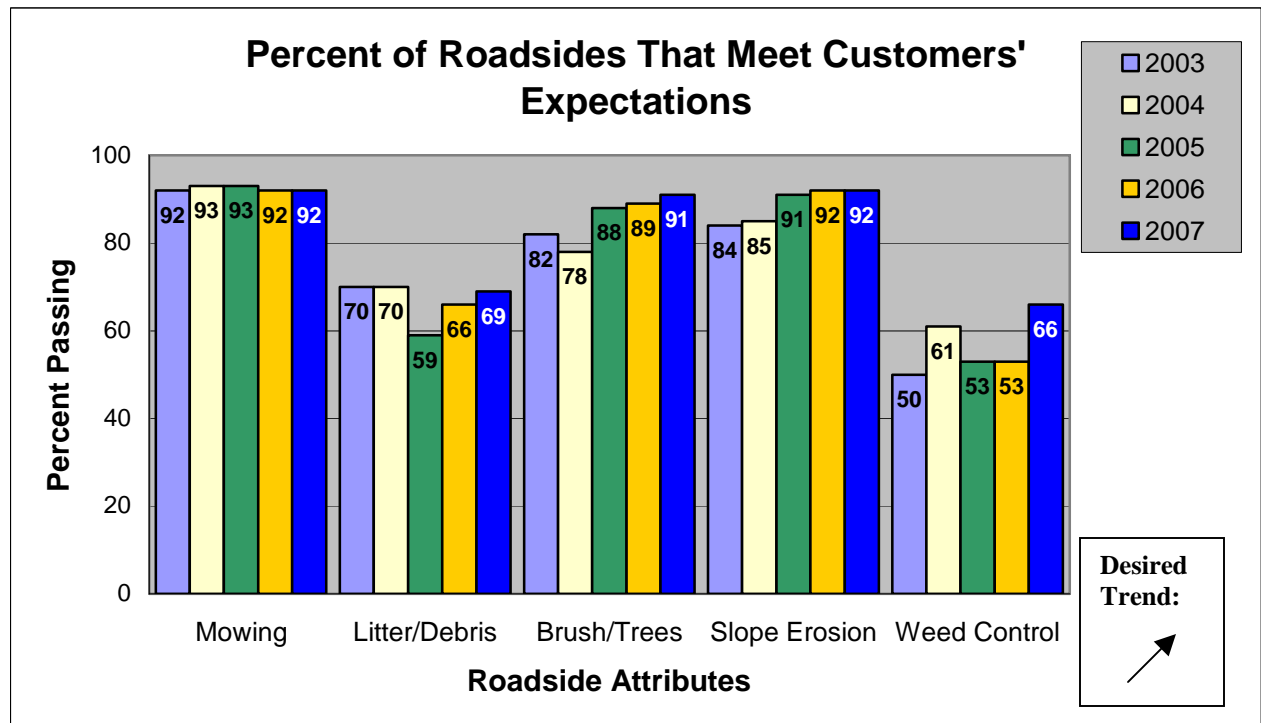
**Measurement and Data Collection:**

A list of roadside quality indicators was developed and approved based on an industry-wide literature review. The activities selected for this measure were used to develop a quality assurance checklist for roadside attractiveness. Data collection for this measure is based on a yearly inspection of a number of randomly selected sample sites located throughout the state. The random sites are inspected yearly for each activity.

This is an annual measure updated each January.

**Improvement Status:**

Over the past five reporting years, the five roadside activities referenced below have shown varying trend lines. MoDOT shifts resources to improve in all categories. Over the last year, litter debris, brush/trees, and weed control improved. MoDOT staff will continue to shift more resources to improve its efforts in litter/debris pickup and weed control.





## Attractive Roadsides

### *Number of miles in Adopt-A-Highway program*

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Stacy Armstrong, Roadside Management Supervisor

**Purpose of the Measure:**

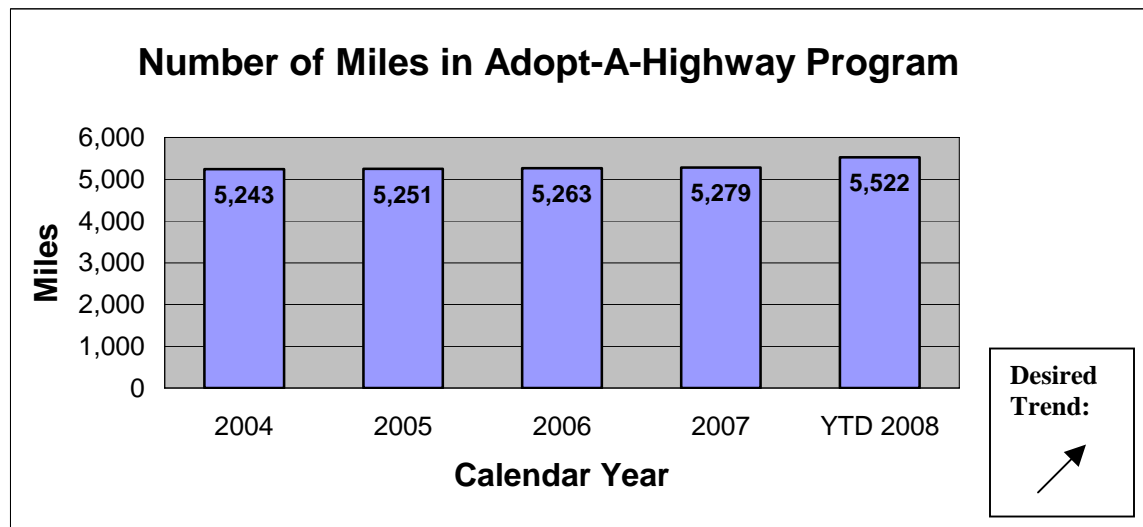
This measure tracks public involvement in taking care of Missouri's roadsides through the Adopt-A-Highway program. Missouri has one of the largest and oldest Adopt-A-Highway programs in the nation. The volunteers learn about litter awareness and some of the challenges MoDOT faces, while allowing maintenance crews to do more critical activities.

**Measurement and Data Collection:**

Adopters agree to pick up litter on a designated roadway section for a minimum of four times a year and report their results. Adopters commit to a three-year agreement when they join the program. Urban adoptions are for a minimum of one-half mile and rural adoptions are for at least two miles. Miles are measured by the centerline, however, volunteers are responsible for both sides of the roadway. Adopter-related information is maintained in an Adopt-A-Highway database using the Transportation Management System. This is an annual measure updated quarterly.

**Improvement Status:**

This quarter shows the largest increase in adopted miles since 2004. This recent success is due to a variety of increased efforts and activities as well as added media attention for No MOre Trash! and the 20<sup>th</sup> anniversary of Adopt-A-Highway. Total miles increased in 2007 with 332 new adoptions. There are 246 new adoptions in 2008. Simplified Adopt-A-Highway rules and regulations became effective Aug. 30, 2006. Adopt-A-Highway information is now easier to find on the MoDOT web site. The program continues to be promoted at Earth Day, state and county fairs, and other events.



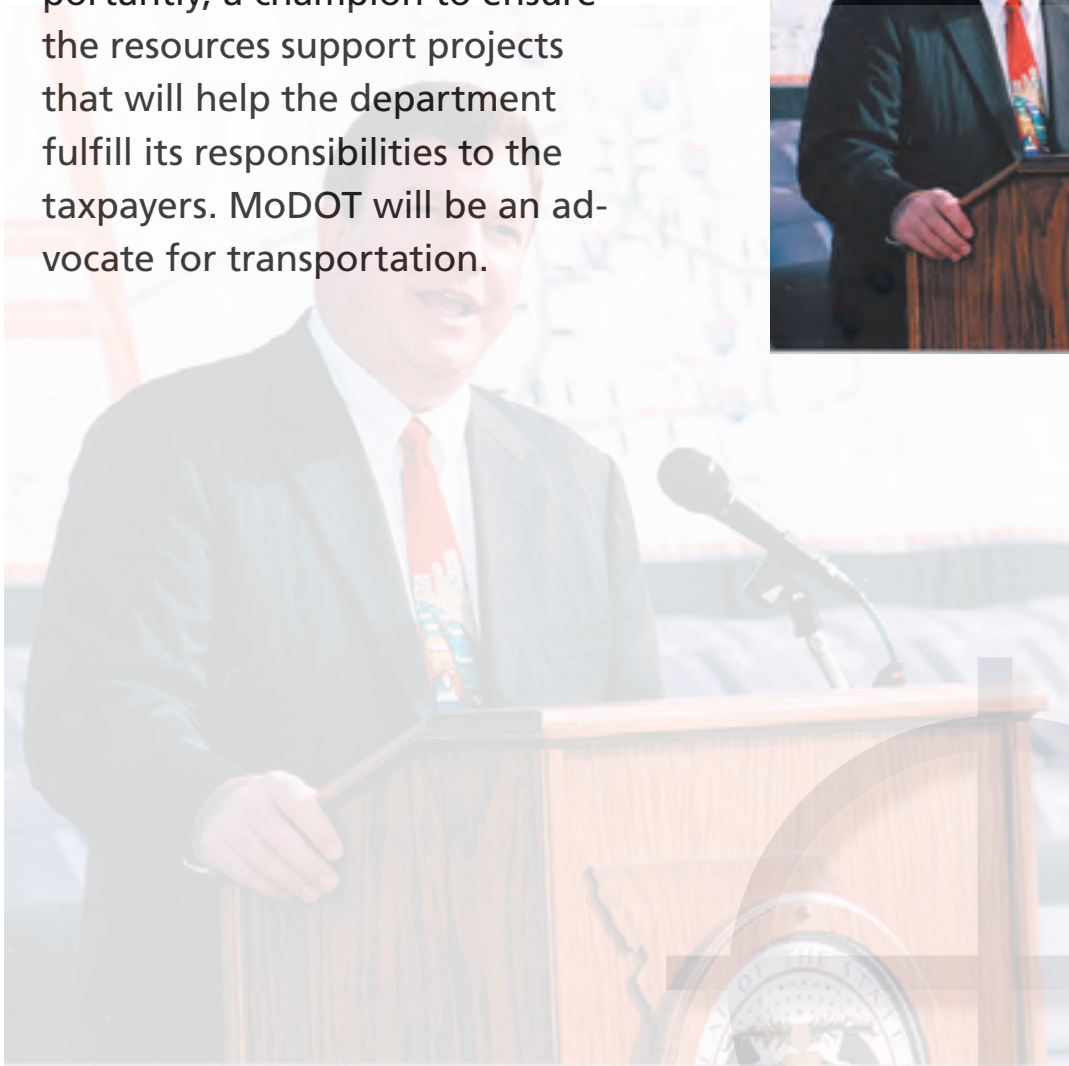
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# Advocate for Transportation Issues

*Tangible Result Driver – Pete Rahn,  
Director of MoDOT*

Transportation issues can be extremely diverse and complex. An efficient transportation system requires leadership and, most importantly, a champion to ensure the resources support projects that will help the department fulfill its responsibilities to the taxpayers. MoDOT will be an advocate for transportation.



## Advocate for Transportation Issues

### *Percent of minorities and females employed*

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Brenda Treadwell-Martin, Equal Opportunity and Diversity Director

**Purpose of the Measure:**

This quarterly measure tracks minority and female employment in MoDOT's workforce and compares it with availability data from the Missouri 2000 Census report. Efficient use of people resources provides opportunities for the department to leverage transportation resources with available human capital. By placing the right people in the right place, the department can better serve its customers and help fulfill its responsibilities to taxpayers.

**Measurement and Data Collection:**

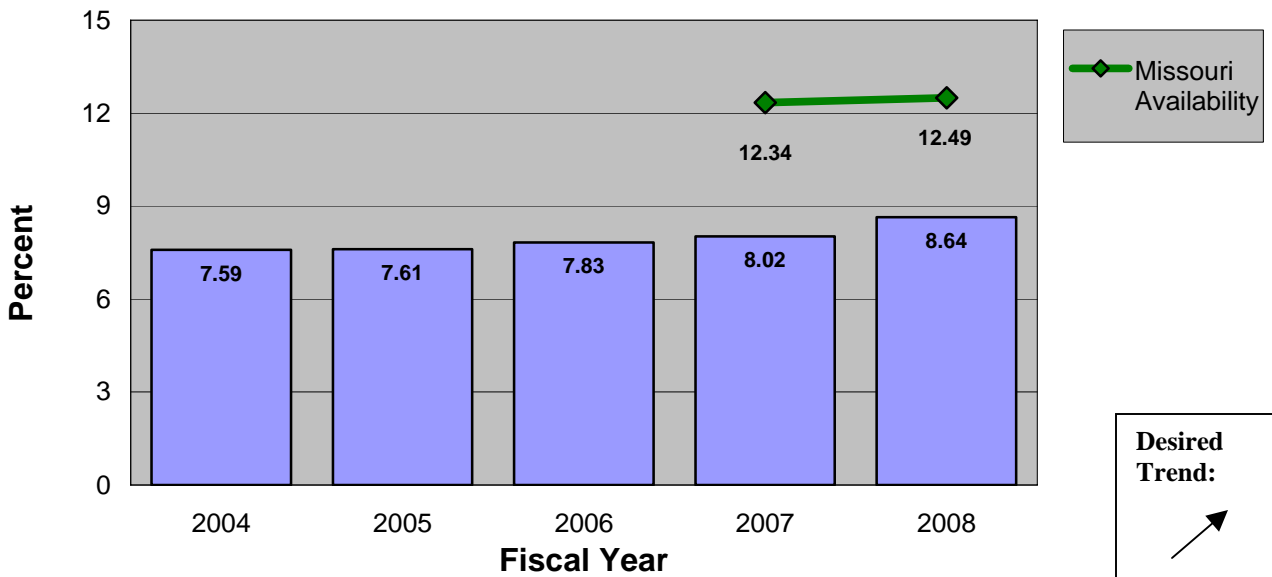
MoDOT's Affirmative Action software database and Missouri 2000 Census Report are used to collect data. Private sector, departments of transportation, Missouri state agencies, and Missouri 2000 Census Data were researched to determine a benchmark for this measurement. Due to the significant variations for some of these entities (such as pay incentives, number of employees, geographic locations), it was determined Missouri 2000 Census Data, based on jobs used by the department, would be the benchmark for this measurement.

**Improvement Status:**

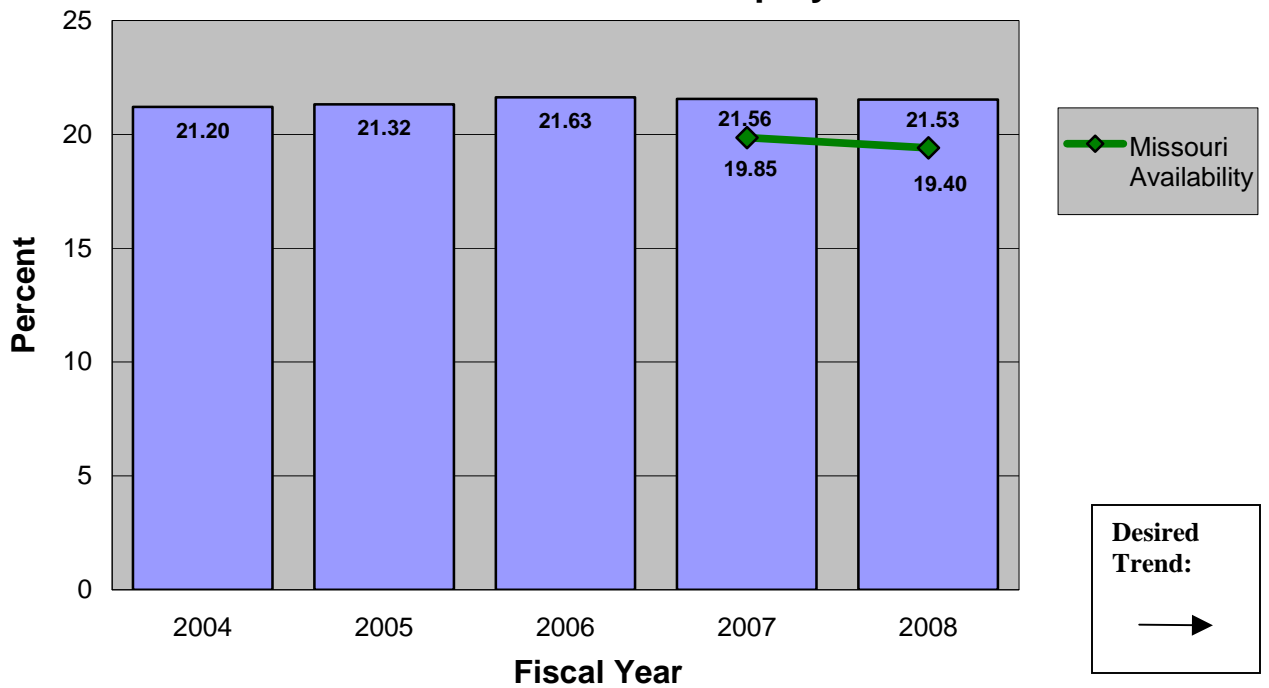
The total number of minority employees increased by 6.89 percent in fiscal year 2008. As of June 30, 2007 there were 508 (8.02 percent) minorities employed compared to 543 (8.64 percent) as of June 30, 2008. While the department experienced an increase in minority employment during the year, the percentage of minorities employed continued to fall short of minority availability, (12.49 percent as of June 30, 2008). Female employment decreased slightly by 0.95 percent (1,366 to 1,353), however female employment continued to exceed female availability (19.40 percent as of June 30, 2008).

During the fiscal year several steps were taken to increase the percentage of minorities and females employed. Some steps included: filling 100 percent of the funded Co-op Program positions, hiring 60 percent of the Co-op Program graduates into full-time positions, utilizing management in recruitment and job fill activities, re-advertising positions to increase the number of female and minority applicants, developing the "Embracing Diversity" Internet site to highlight diversity opportunities at MoDOT, using Kansas City and St. Louis Community Liaisons to build relationships with community organizations and officials regarding employment opportunities, and focusing on hiring and developing qualified minority maintenance workers.

### Percent of Minorities Employed



### Percent of Females Employed



## Advocate for Transportation Issues

### *Transportation-related legislation passed by the General Assembly*

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Lisa LeMaster, Senior Governmental Relations Specialist

**Purpose of Measure:**

This measure tracks significant transportation-related legislation passed by the General Assembly. Significant transportation-related legislation is legislation that is either favorable or unfavorable with regard to providing transportation resources, supporting transportation projects, creating efficiency within the department, or promoting roadway safety. This measure also tracks the department's progress on its own legislative agenda.

**Measurement and Data Collection:**

During session, data is obtained by reviewing both the Senate and House Web sites for legislation in the transportation subject categories. Each bill is reviewed then to determine whether it contains an initiative that is favorable or unfavorable to transportation. The total favorable initiatives filed are compared to the total favorable initiatives that pass and the total unfavorable initiatives filed are compared to the total unfavorable initiatives that pass. The number of favorable and unfavorable transportation-related initiatives filed and number passed are noted on the first chart as an annual measure.

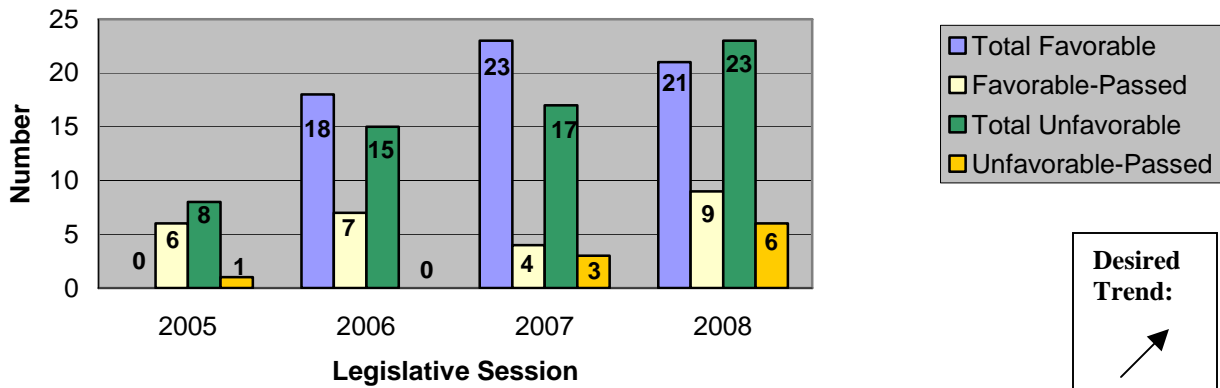
Also, each fall potential legislative proposals are submitted to the Missouri Highways and Transportation Commission for review and approval. The second chart tracks each approved legislative proposal through the legislative process.

**Improvement Status:**

MoDOT's desired trend is to see all MHTC proposed legislation pass. During the 2008 legislative session, the MHTC proposed three separate legislative initiatives, "Automated Speed Enforcement in Work Zones," "Increased Penalties for Highway Workers," and "Unified Carrier Registration." One of the three legislative proposals, "Unified Carrier Registration," received legislative approval. MoDOT was also successful in having additional money appropriated for Amtrak and for Missouri port authorities. However, the appropriation items are not tracked in this measure.

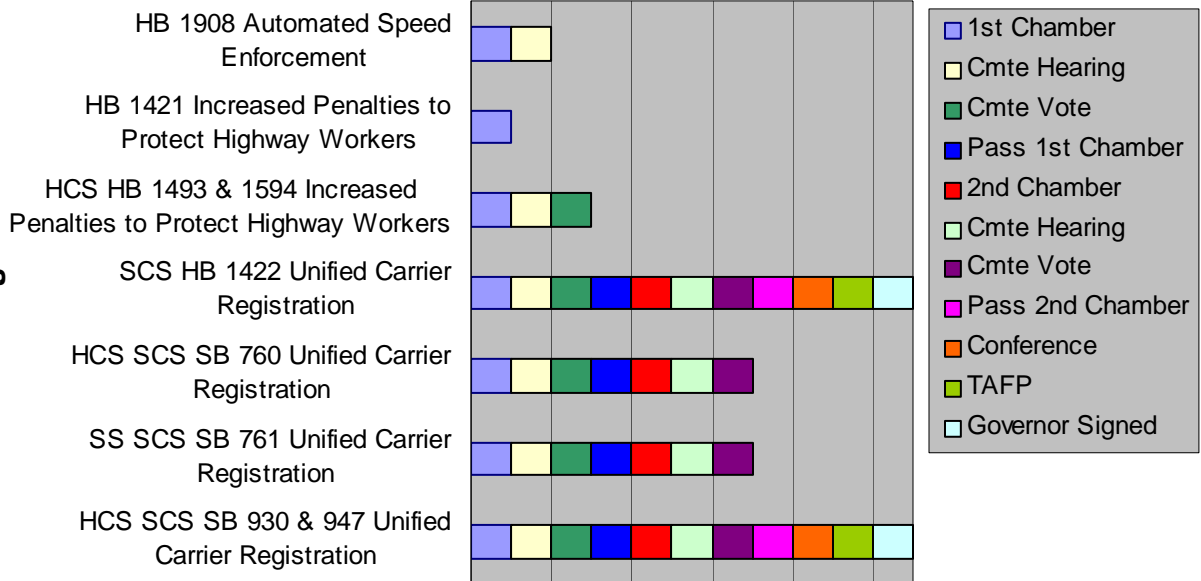
MoDOT's desired trend as an advocate for transportation is also to see a larger number of favorable transportation initiatives pass when compared to unfavorable initiatives that pass. During the 2008 session, of the total 2,032 bills filed, 11% were transportation-related which equates to 231 transportation bills. Of the 231 transportation bills, there were 44 significant transportation initiatives contained in those bills. Of the 44 significant initiatives, 21 were favorable and 23 were unfavorable. Of the 21 favorable initiatives, 9 passed and 12 failed. Of the 23 unfavorable initiatives, 6 passed and 17 failed. All other initiatives filed in transportation bills were neutral with regard to their impacts on transportation.

### Number of transportation-related legislation filed by the General Assembly



### Progress on MoDOT Legislative Initiatives

2008 - 94th General Assembly  
Second Regular Session



Progress

**Desired Trend:** →

## Advocate for Transportation Issues

### *Percent of federal earmarked highway projects on the state highway system identified as needs.*

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Kent Van Landuyt, Assistant to the Director

#### **Purpose of the Measure:**

Missouri's support for transportation on the national level is demonstrated by the impact of federal legislation on Missouri's ability to address transportation needs. The percent of federal earmarks on the state highway system, that are also identified as Missouri needs, is representative of the department's success as an advocate of the state's transportation needs.

#### **Measurement and Data Collection:**

This is an annual measure. The data represents the percent of federal earmarked highway projects on the state highway system that are identified as needs. The percent of federal earmarked individual projects on the state highway system represents the department's success in working with Missouri's Congressional delegation and have been identified as needs, demonstrates MoDOT has provided adequate information to the Missouri Congressional members that these needs are the same needs recognized by their constituents. The identified needs for this measure are projects on the state highway system that are included in the STIP or projects ready to be added to the STIP as soon as funding becomes available.

#### **Improvement Status:**

The chart shows Missouri was very successful in fiscal year 2004, fiscal year 2005 and in SAFETEA-LU. In fiscal year 2006, Congress chose to not designate any transportation earmarks in the fiscal year 2007 Transportation Appropriations Act.

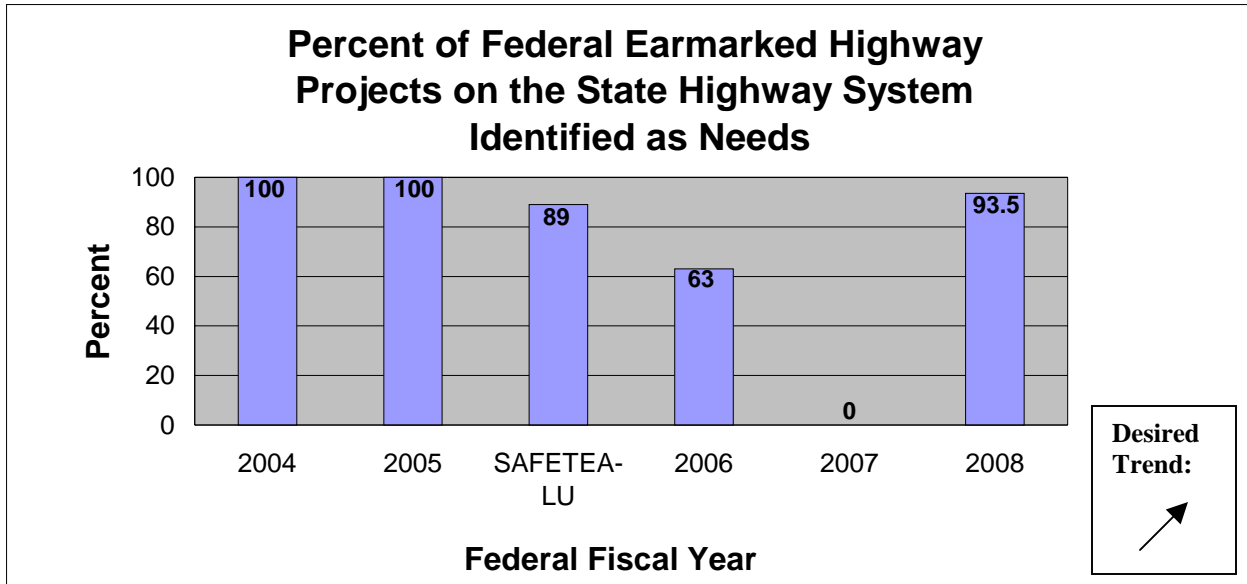
MoDOT staff continued to support transportation needs by providing information to all of Missouri's Congressional offices in anticipation of future opportunities. The fiscal year 2008 appropriations process was, once again, successful for Missouri, as 93.75 percent of the earmarked projects were identified needs.

Missouri continues to be successful in receiving transportation earmarks that are identified needs and funds MoDOT can put to work immediately to improve Missouri's transportation system. As recently as March of this year, an Omaha newspaper recognized MoDOT as one of the state agencies that is able to move forward with projects that received Congressional earmarks.

Interaction with Congress is very important in receiving earmarks for projects that are identified needs. Therefore, MoDOT continues to meet with the staff of each member of Missouri's U. S. Congressional delegation on a regular basis and continues to provide information on transportation issues, urging them to support programs, and projects that address Missouri's transportation needs. In calendar year 2008, MoDOT staff has continued to meet with all of our Congressional offices and provide them with details on highway, transit and aviation projects for federal fiscal year 2009 appropriations.

MoDOT is striving for more than 85 percent of the state highway system earmarked projects to be identified needs. The department will continue to communicate directly with Congressional staff members to increase the number of earmarked projects that are identified needs on the state transportation system.





## Advocate for Transportation Issues

### *Percent of customers who view MoDOT as Missouri's transportation expert*

**Result Driver:** Pete Rahn, Director of MoDOT

**Measurement Driver:** Jay Wunderlich, Governmental Relations Director

**Purpose of the Measure:**

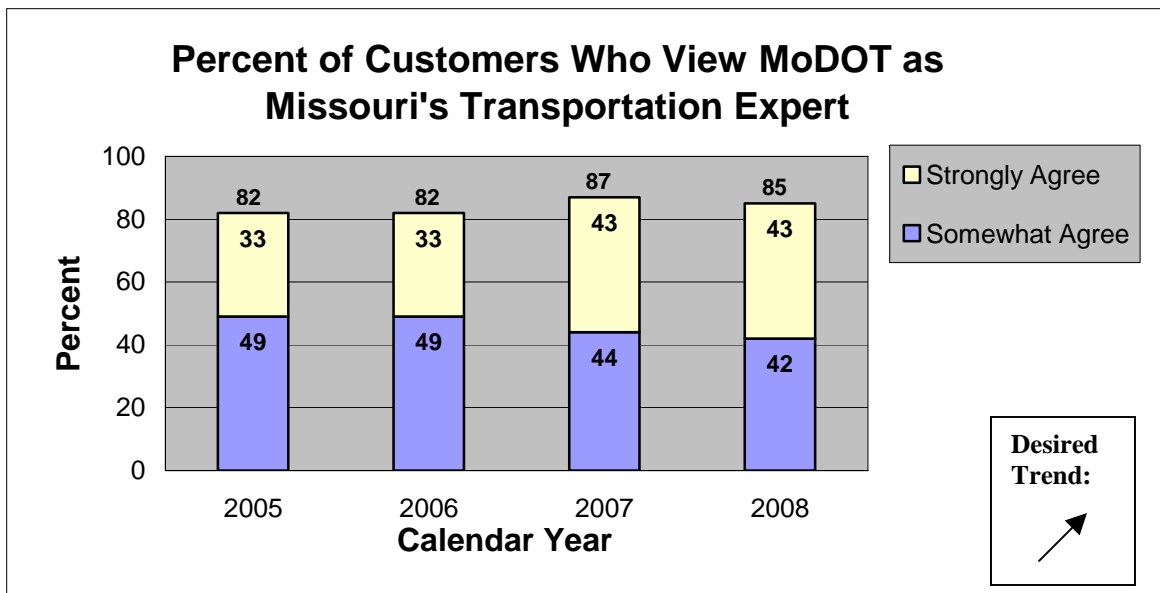
This measure tracks whether our customers feel the department is a leader and expert in transportation issues. The measure shows the department how effectively MoDOT conveys its expertise to the traveling public.

**Measurement and Data Collection:**

This is an annual measure updated each July. Data is collected from interviews with over 3,500 randomly selected adult Missourians each May. Each year, MoDOT surveys public opinion to collect information that will tell the department whether or not the public views MoDOT as the primary transportation expert in Missouri.

**Improvement Status:**

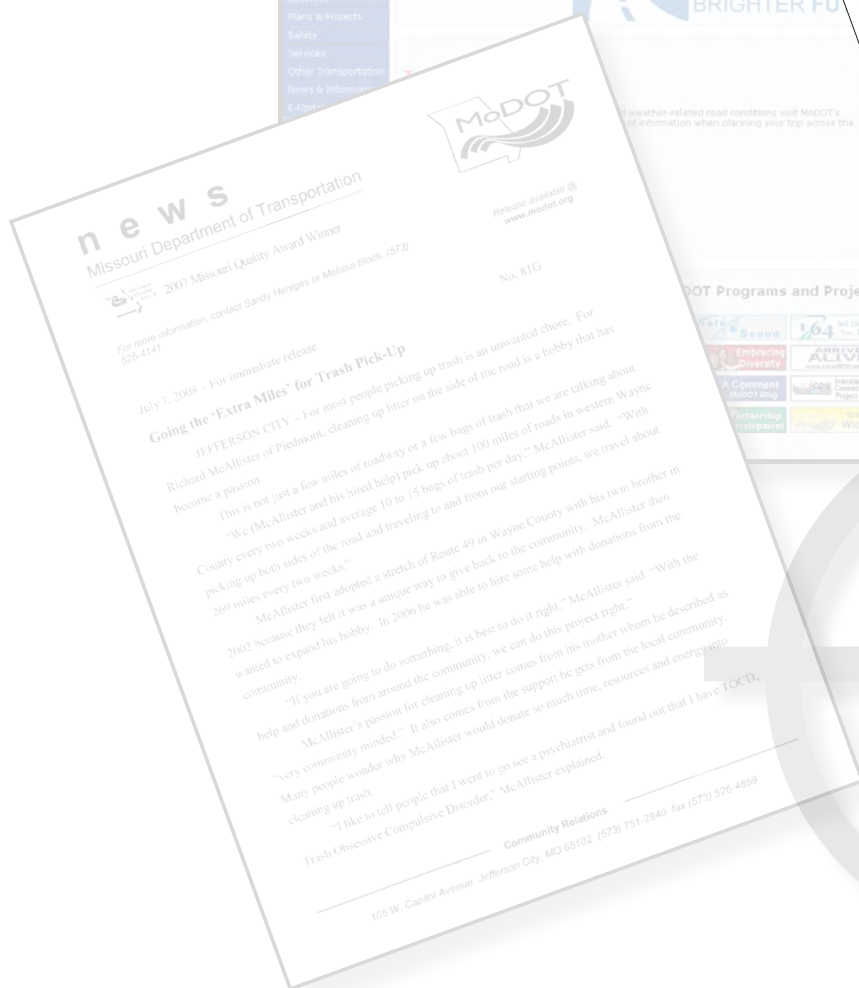
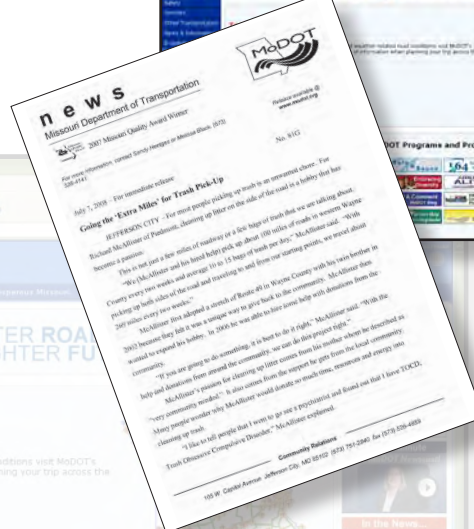
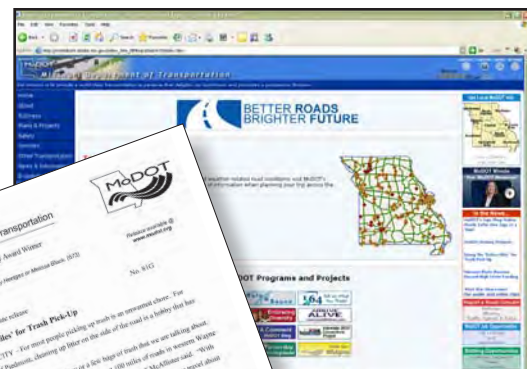
The current information shows that 85 percent of respondents indicate MoDOT is the transportation expert they rely upon. This represents a slight decrease of 1.7 percent since last surveyed in 2007. Through a questioning approach identical to the 2007 survey, the 2008 numbers remained basically flat in the strongly agree responses thus reflecting a higher percent of individuals that disagreed with this statement than previously (15 percent in 2008 vs. 13.3 percent in the last year). MoDOT must continue to work on improving partnerships with citizens, legislators and special interest groups promoting MoDOT as a transportation expert. Ways to accomplish this include increasing awareness of MoDOT's responsibilities to and services for the traveling public.



# Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

*Tangible Result Driver – Shane Peck,  
Community Relations Director*

Accurate, consistent and timely information is critical to accomplishing MoDOT's mission. By providing this information to its customers, MoDOT becomes the first and best source for transportation information in Missouri. Openness and honesty build trust with our customers.



## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Number of public appearances*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Coordinator

**Purpose of the Measure:**

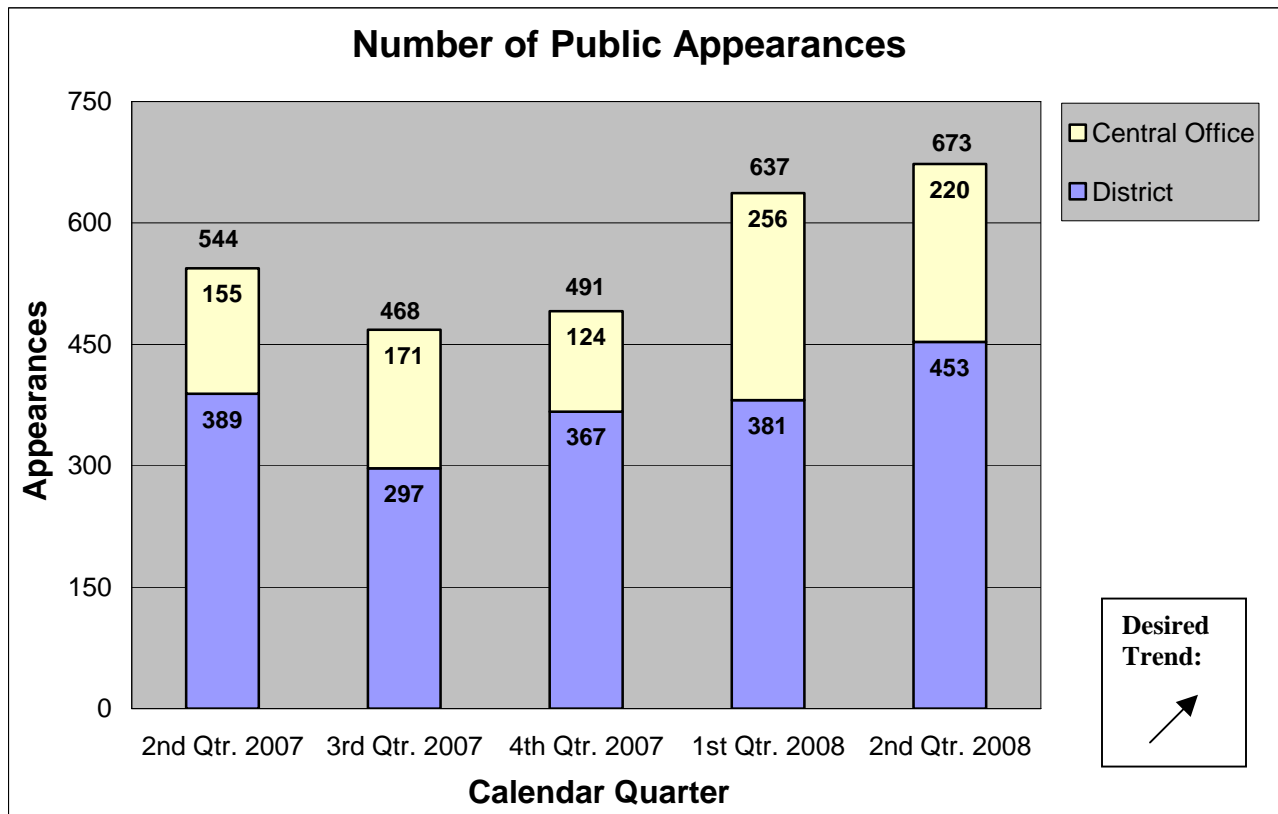
This measure tracks and encourages regular, personal contact with MoDOT customers. A public appearance is defined as any single, public event attended by one or more MoDOT representatives to provide transportation related information. Examples include speeches, presentations, conferences, exhibits, fairs and ribbon cuttings.

**Measurement and Data Collection:**

This is a quarterly measure. District Community Relations managers collect appearance information from their administrators on a quarterly basis and send it to Central Office Community Relations where it is combined with data from divisions and business offices to create a statewide report. The numbers change from quarter to quarter because certain events and other public appearance opportunities are seasonal, such as school visits and fairs.

**Improvement Status:**

MoDOT's districts and Central Office reported a record number of public appearances during the second quarter of calendar year 2008: 673 public appearances, with districts contributing a record number of 453. MoDOT staff reached almost 49,000 people through these public appearances. Community activities, legislative hearings, training and school presentations, along with project outreach activities, contributed to the overall results. MoDOT has also updated and promoted its speaker's bureau to boost public appearances.



## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Percent of customers who feel MoDOT provides timely, accurate and understandable information*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Coordinator

**Purpose of the Measure:**

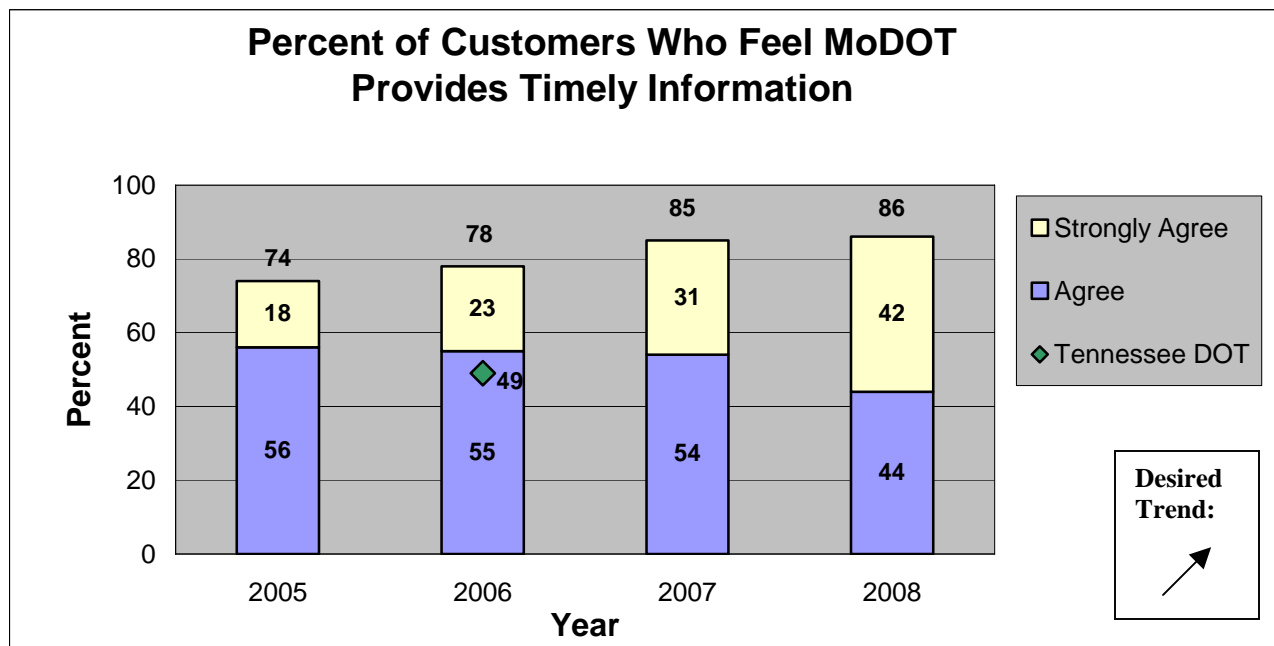
This measure tracks whether customers feel MoDOT provides timely, accurate and understandable information they need and use.

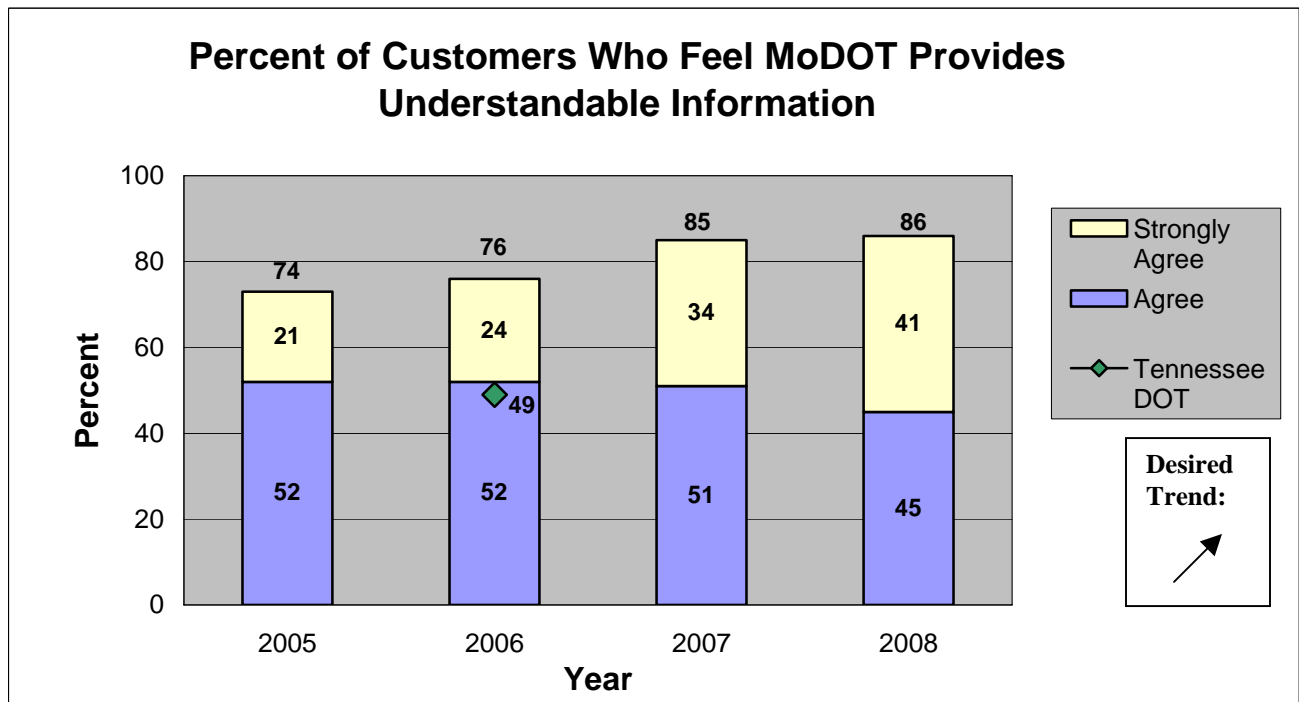
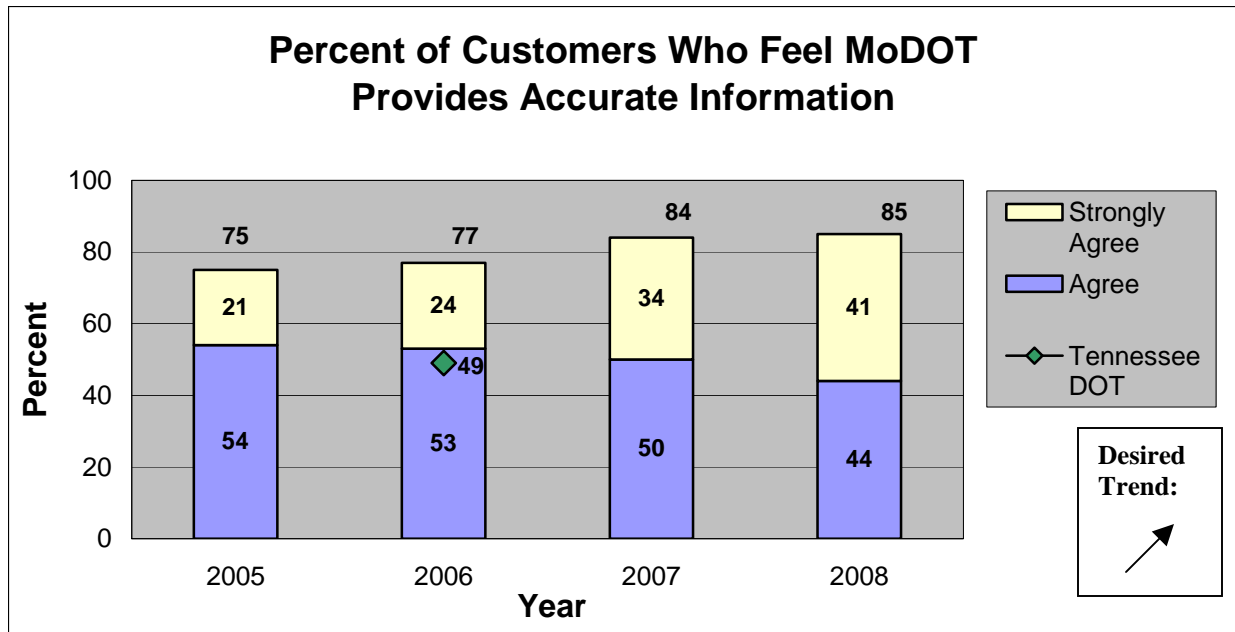
**Measurement and Data Collection:**

This is an annual measure. Data is collected from telephone interviews with more than 3,500 randomly selected adult Missourians each May. As a comparison, the Tennessee Department of Transportation reported in September 2006 that 49 percent of residents surveyed said they were satisfied or very satisfied with the agency's efforts to keep them informed about transportation-related issues.

**Improvement Status:**

The number of customers who agree or strongly agree that MoDOT provides timely, accurate and understandable information remains strong and continues to grow. There were increases in the strongly agree section in all three areas, with the percentage of those who strongly agree MoDOT provides timely information rising 11 percent. Efforts to focus on transparency and outreach activities have contributed to the increase, as have communications tools such as the Traveler Information Map, the electronic message boards, MoDOT's blog and YouTube presence and the MoDOT Minute. Providing information on major projects including the Better Roads, Brighter Future program, the Safe & Sound Bridge Improvement Plan, the New I-64 and kcICON, in addition to achieving fewer highway fatalities and receiving the Missouri Quality Award, contributed to the positive responses.





## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Number of contacts initiated by MoDOT to media*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

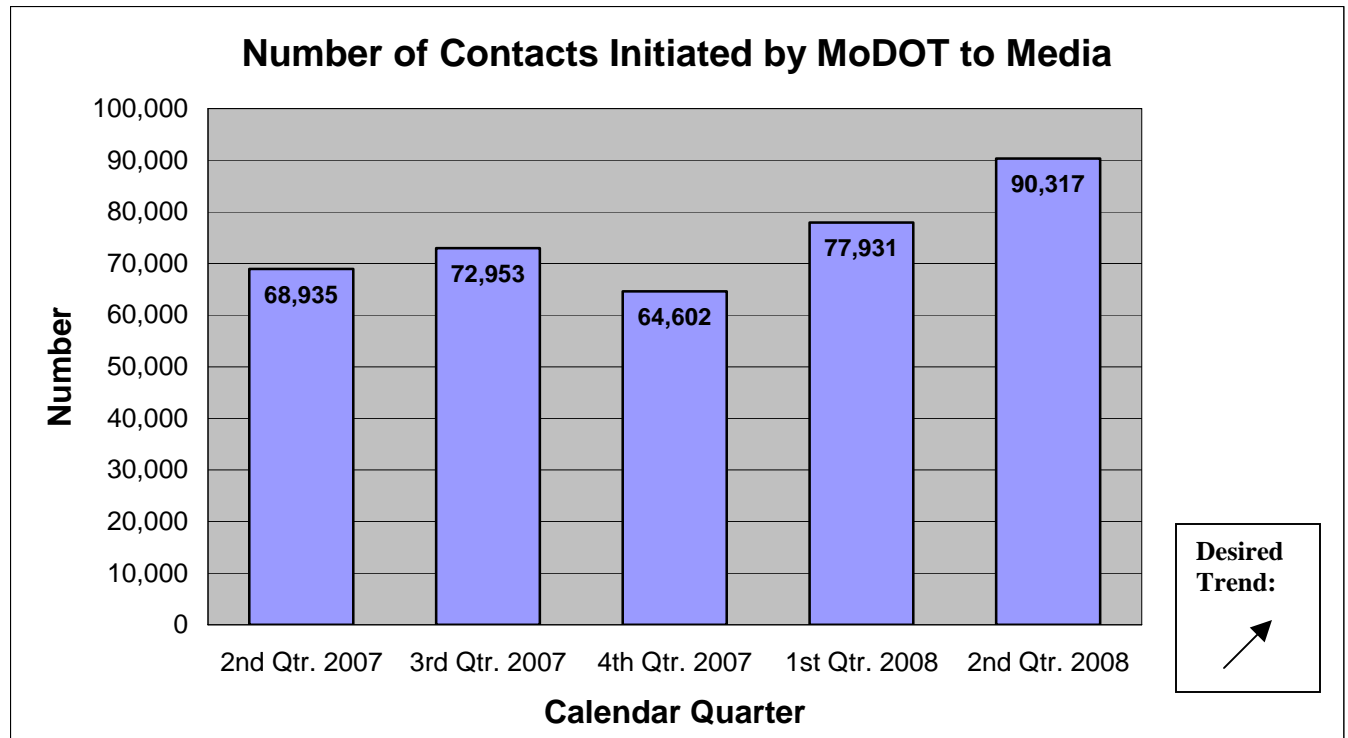
This measure tracks how well MoDOT staff is “reaching out” to reporters to tell them about the good work MoDOT does.

**Measurement and Data Collection:**

All contacts (news releases, e-mail, phone and correspondence) initiated by MoDOT staff are included. Central Office Community Relations collects quarterly results, including submissions from districts.

**Improvement Status:**

Contacts were at an all-time high this quarter, largely due to frequent media updates on flooded roads. Media contacts were up 31 percent over this time last year. MoDOT has placed more emphasis on a series of quick updates during weather events this year, routing people to the Web site and toll-free number, to keep media and the public informed of breaking news.



## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Percent of MoDOT information that meets the media's expectations*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

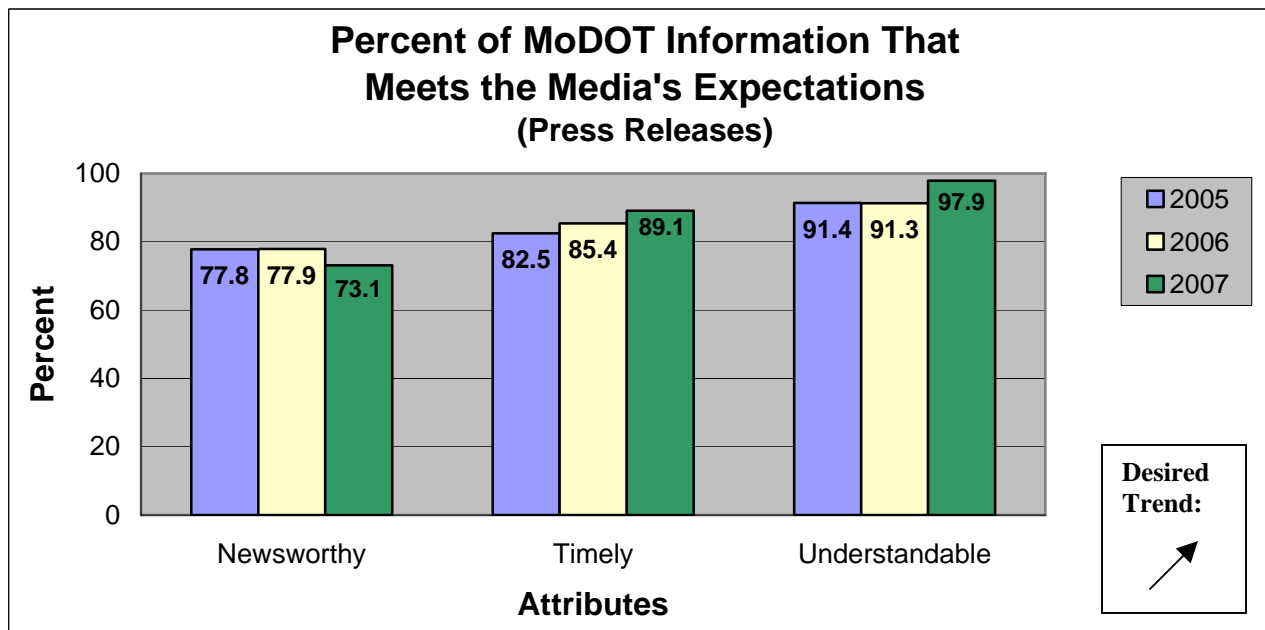
This measure tracks how MoDOT is meeting the media's needs by providing appropriate information.

**Measurement and Data Collection:**

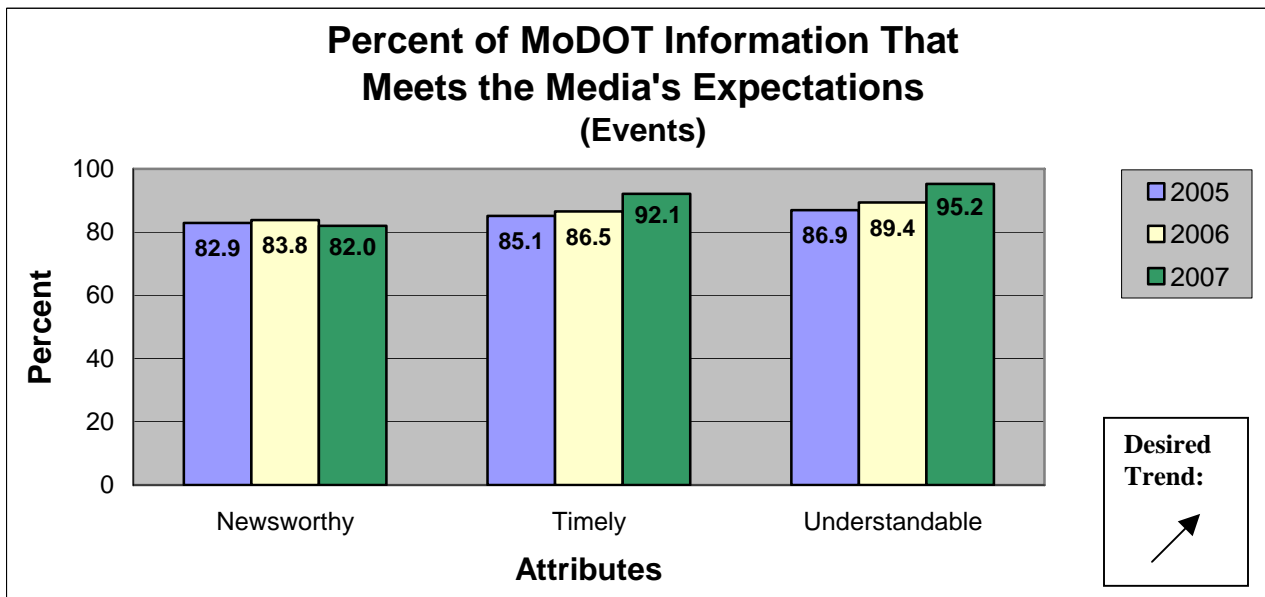
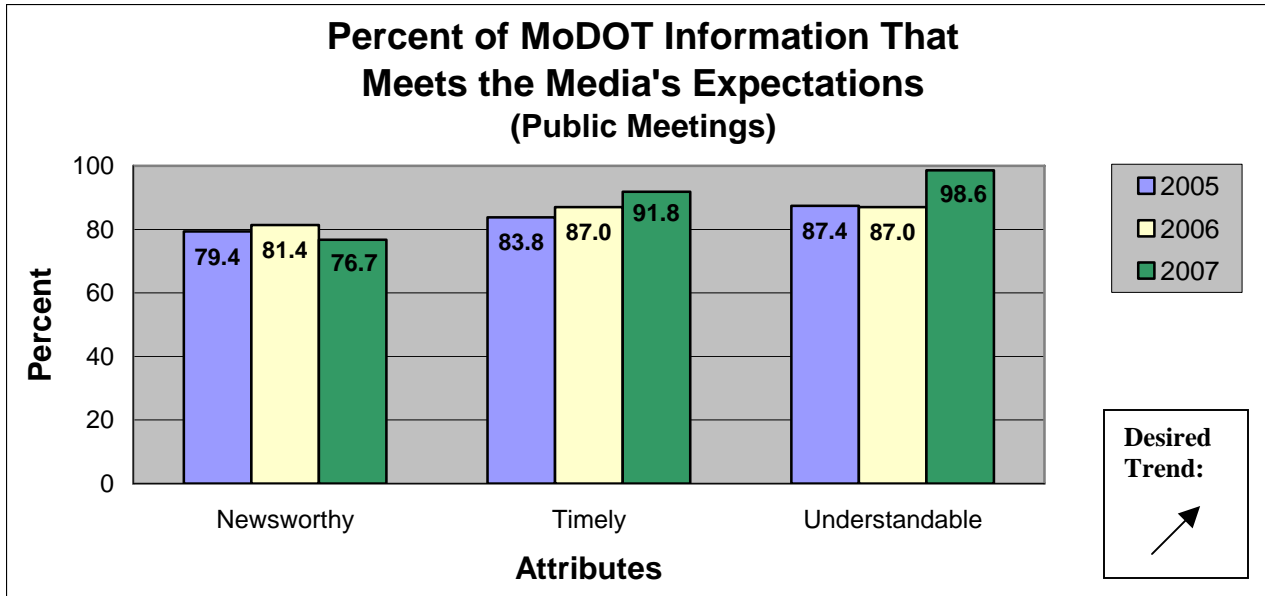
MoDOT sends out an annual survey asking statewide media if MoDOT's outreach efforts meet their expectations. They are asked to rate their level of satisfaction in the areas of press releases, public meetings and events. Each area is further rated in newsworthiness, timeliness, and how understandable it is.

**Improvement Status:**

No new information for this annual measure. The 2008 annual survey is conducted each July. Ninety-four media participated in our 2007 survey. Generally, newsworthiness declined while timeliness and understanding grew. Newsworthiness remains relatively high while media contacts have grown more than 50 percent in the past year. MoDOT is monitoring releases to make sure increased frequency doesn't mean a decline in news value.







## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Percent of positive newspaper editorials*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jeff Briggs, Community Relations Manager

**Purpose of the Measure:**

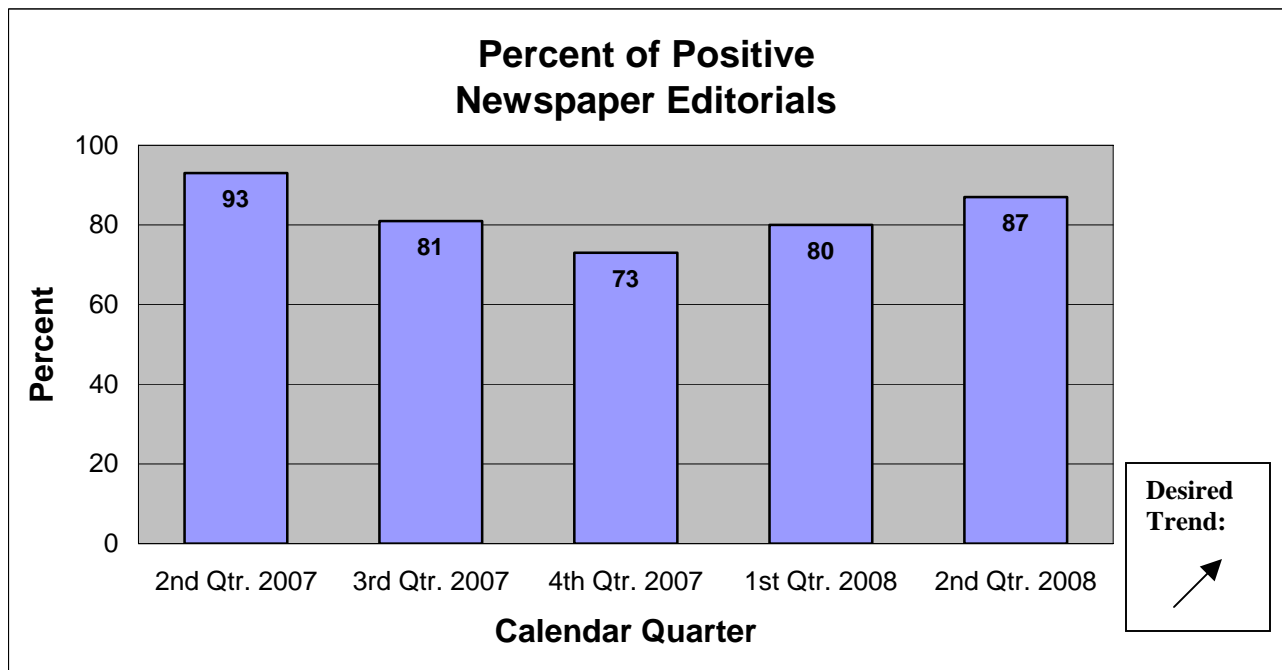
This measure tracks how MoDOT is perceived by the media, and by extension the public.

**Measurement and Data Collection:**

Using a newspaper clips database, MoDOT staff reviews statewide newspaper editorials and determines whether they're positive or negative toward MoDOT and/or the issues it advocates. Only editorials written by newspaper staff are included; guest editorials and letters to the editor are not. Results are charted quarterly.

**Improvement Status:**

Of 30 editorials regarding MoDOT or state transportation, 26 were positive (87 percent). The strongest editorial support, for the second straight quarter, was for the need for increased state transportation funding – seven editorials, all-positive. Five editorials also weighed in against the proposed legislative repeal of the state's fuel tax; a positive for us.



## Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

### *Number of repeat visitors to MoDOT's web site*

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Matt Hiebert, Community Relations Coordinator

**Purpose of the Measure:**

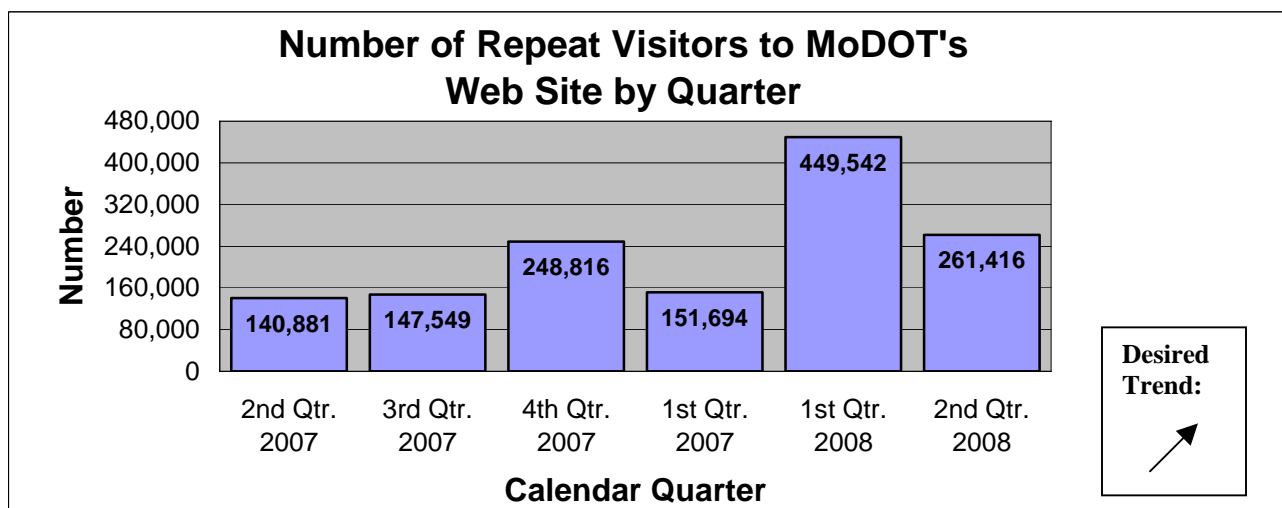
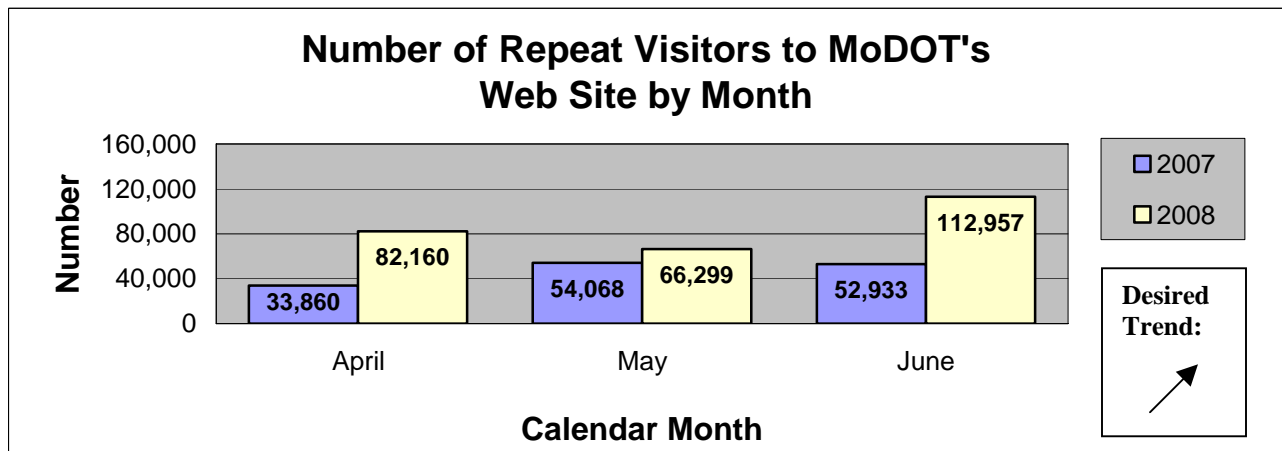
This measure tracks the number of customers who have used MoDOT's Web site on a repeat basis. The data helps demonstrate whether the public views the site as a valuable information resource. If they are returning to the site for multiple visits, they probably view it as a worthwhile use of their time online.

**Measurement and Data Collection:**

Data is gathered using Web Trends software. Web Trends measures site activity and produces reports in graphic and tabular formats.

**Improvement Status:**

Milder weather has dropped overall web traffic but allowed the public to turn to the site for work zone, job, news and business content. Since this quarter's figures are not being fueled by natural disaster, they reflect broader, content-driven motives for people returning to the site. Although down from first quarter, they show a significant increase over last year's totals, with June demonstrating more than a 110 percent increase in repeat visitors.



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